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Illustration from Jñānesvarī

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ŚATĀBDA-KAUMUDĪ

CENTENARY VOLUME

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CENTRAL MUSEUM, NAGPUR

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Editorial Panel

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Introduction

Many significant and important changes have taken place in museological thinking in our time. We have travelled a long way from the first museum founded at Alexandria by the Ptolemies, the Greek Rulers of Egypt. For many centuries the museum was a place used by scholars and advanced research workers It was the privilege of scholars to be able to visit and work in the museum A revolutionary change has now taken place and today the museum is not for scholars alone but for all. The Central Museum, Nagpur, is an institution which is serving the city of Nagpur, the Vidarbha area and the State of Maharashtra in the spirit of this modern concept The story of the Nagpur Museum has been told elsewhere in this volume The Centenary of this museum is being celebrated this year and Government wanted to bring out a volume of essays and research papers on topics of museological interest on this significant occasion.

The present volume is the outcome of this desire on the part of the Government At a meeting of the Centenary Celebration Committee appointed by the Government, it was resolved that such a volume be undertaken and that an editorial panel consisting of—

(1) Mm Dr. V. V Mirashi, Nagpur

(2) Dr M G Dikshit, Nagpur

(3) Dr P. M. Joshi, Bombay

be appointed for this purpose

Members of the editorial panel made a list of scholars who were to be invited to prepare papers for this volume. Most of these scholars whom we approached responded to our invitation I place on record our thanks to all of them for so readily acceding to our request. I must also thank Dr. N. N Kailas, the Deputy Minister tor Education and Chairman of this Centenary Celebration Committee for enthusiastically supporting our idea of preparation of a Centenary Volume.

The articles in this volume fall into two categories. Some deal with sections of the Central Museum, Nagpur, such as Archæology, Ethnology, Picture Gallery, Geology, etc Others deal with exposition of museum ideas and archæological topics not necessarily restricted to this State.

An interesting and somewhat unusual paper is on music and musical instruments as portrayed in stone. Another paper deals with an important coin hoard which came to light recently. The State of Maharashtra is particularly fortunate in getting into its

possession, under the Indian Treasure Trove Act of 1878, a unique hoard of Bahmani gold and silver coins and Vijayanagar *Pagodas* A preliminary study of this hoard is made in this paper. The norms for museum today are given in one paper and another describes museums in the State of Maharashtra We have thus a representative fare of museological subjects in this volume.

In thanking the persons who saw this volume through the Press, I must mention the names of Shri Bapurao Naik, Deputy Director, Printing and Stationery, Government of Maharashtra, Shri S. R Desai, Manager, Government Press and Book Depot, Nagpur, Shri M D. Prabhu, Assistant Manager and their staff for the untiring zeal they showed in printing this volume Shri V V. Athavale, Artist, Central Museum, Nagpur, did the design on the jacket with imagination and an artist's flair To all these four I give my very best thanks Their efforts have succeeded in making the volume worthy of the occasion of the Centenary of the Central Museum, Nagpur

The colour plates reproduced in this volume are the work of the well-known firm of Messrs Shivraj Litho Works, Nagpur.

I have to thank my colleagues, Dr. V. V. Mirashi and Dr M G. Dikshit for their help, advice and guidance so ungrudingly given whenever demanded Dr Dikshit laboured hard in the arduous and exacting work of proof correction and making the papers ready for the press. In the early stages of this work, he was helped by Shri D. R. Amladi, Assistant Director of Archæology, Aurangabad Shri V. P Rode, Curator, Central Museum, Nagpur, was responsible for all preliminary preparations in connection with this volume and for general assistance to Dr. Dikshit Shri V. S Kamat was of general help to me while this volume was taking shape.

Dr Dikshit asked me whether I could suggest a more apposite title for this volume than the mere simple and somewhat pedestrian *Centenary Volume* In consultation with my good friend Dr V. S Agrawala I lighted on *Anant-Kaumudī* as the volume dealt with the Nagpur Museum My colleagues on the Editorial Board, Mm. Dr Mirashi and Dr. Dikshit had in the meanwhile thought of *Śatābda-Kaumudī* which seemed equally if not more appropriate and we adopted it

I now commend the *Śatābda Kaumudī* to the attention of scholars

P M JOSHI,
Director of Archives and
Historical Monuments,
Government of Maharashtra

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Museums Today

Dr Grace Morley

Museums boasting a hundred years of existence, are very rare anywhere in the world today The Nagpur Museum is one of the few in India, and it can point, besides, to a steady development and growth throughout its long history A Centenary is a good time, not only to review one's own career as the Nagpur Museum is doing on this anniversary, but to consider the place of museums in the contemporary world

In the past eighty years or so museums have multiplied A striking number were founded everywhere in the 1870's and many of the museums begun at that time are now among the outstanding museums of their respective countries Since that date the pace of museum creation has accelerated fairly steadily At present, the expansion of knowledge and the growth of education, as well as the tendency to have more museums specializing in one field and to divide many general museums into their several separate units, give impetus to the movement to increase the number of museums everywhere Because of the need for hastening and expanding training in the sciences there is much general interest in making efforts to establish museums of sciences and technology This is especially true of India, which feels the need of them to supplement its education in the sciences and its scientific and technological development It appears certain therefore that museums can look forward to a substantial increase in their number during the next few years and to new opportunities for service

For forty years or so museums have been conceded, in theory at least, a sure place among institutions of learning and education In practice, some museums have justified this definition of their functions more than amply, others have interpreted both "learning" and "education" in very liberal terms indeed, and have remained totally inactive, or have served only idle curiosity or recreation, or have lapsed into complete passivity In India, where museum material is so abundant, especially in the fields of archæology, the handicrafts, the arts and anthropology, it is rare to discover a museum lacking collections, such as are sometimes found in other countries However, as elsewhere, collections exhibited here often are deficient, not only in the manner of presenting them but also in regard to discrimination in selection of the items to be shown, while reserve collections, often of the greatest value for

research, are likely to be chaotic, ill-kept and inaccessible Likewise, the techniques of making the museum and what it exhibits and holds in reserve for study and research, truly useful to the community are relatively new in India A few museums have shown the way, but even they can be considered to stand only on the threshold of their potential services in contemporary Indian society The reasons are many and only a few need be indicated here With Independence there came a great upsurge in the spread of education at all levels throughout the country The too few teachers had little or no experience of museums and they had not time, nor did they have many opportunities, to learn about the refinements of using museum exhibitions, and actual objects in museums, to enrich the various subjects that they were teaching There was also, in India, a tradition of bookish education from which only a few teaching institutions are freeing themselves to some extent even now To use the real object as illustration of a subject was therefore an alien notion For lack of active museums, well developed for both school and mass education, the value of Indian archæology and art to the cultural development of Indians of all ages was likewise not generally understood nor emphasized, either among community leaders or among educators Yet museums of archæology and the arts are found almost everywhere in India, even in quite small cities, and they could be a tremendous local resource for cultural enrichment In a real sense they can be said to express the personality of the nation as it has come from the past into the present—a rich inheritance on which the present and future should draw

In these circumstances, much credit must go to the teachers who organized at least the annual school visit to the local museum, even if it amounted to little more than an outing, as two or three hundred youngsters trooped through the galleries docilely hand in hand, breaking ranks with a great whoop to race up and downstairways and corridors at the formal visit's end Likewise, the few museums that instituted a good while ago regular guide services for visitors of every type deserve commendation These are both tentative efforts in the right direction, but they must be regarded only as a beginning of museum educational and cultural services and a rather elementary one, at that To make the museum the active instrument of education that it is potentially requires much more, of museums themselves and their staffs, of educators, of cultural leaders, and of the public at large

Contemporary life gives museums of natural history, of sciences, technology and industry, far fewer in India than those of archæology and art, special importance in relation to education today Their exhibitions, which employ advanced techniques, and must keep abreast with the progress of research and development, are clearly designed to instruct the viewer, by observation and sometimes by participation But they too require guide lecturers and facilities for school visits They must in addition include demonstrators and teachers on their regular staffs Beginnings in encouraging this kind of museum development have been made here in India, separately in a few cases, in association with other subjects, more frequently. Their educational value is already widely recognized

It is encouraging to discover that the need for further educational development and use of museums is recognized in international circles of museum leadership as a world-wide problem In some aspect of the effort to meet this problem India is already considered to be able to offer useful examples to other countries, not so far along the road of museum development Thus the International Council of Museums (ICOM, the non-governmental international professional organization which advises and assists UNESCO in the museum field) has announced the following points for emphasis in its programme of the immediate future the educational and cultural role of museum, training of museum personnel, aid to museums in developing countries This is in support of UNESCO's own programme on museums, of which the draft is to be presented to the General Conference in Paris, in November 1964, and is expected to be adopted Among many items that can be considered related to this field of

wider development of museums for their cultural/educational value, UNESCO's draft programme for 1965-66 (Section 3 343) emphasizes an item of specific bearing on this subject "development of the educational activities of museums" Among much else generally useful for the purpose, it includes an International Seminar on this subject proposed to be held in India in early 1966 In preparation for activity in this field an international meeting of experts in museum education, to survey the field and to bring in recommendations for its development, has been organized for November 1964, by the French National Commission for co-operation with UNESCO and ICOM, in consultation with UNESCO In short, the broadest possible attention, on international levels, as well as nationally, is at present being placed on the educational role of museums National response can be expected from all Member States of UNESCO, and India is designated for leadership as a result of the role of the projected UNESCO International Seminar here

It is a happy circumstance that a foretaste of this international concern for Museum education is found in this country's own museum-planning A year ago, at Lucknow, the Museum Association of India chose for the Seminar of its next meeting the subject, "Children's museums and education in museums" The discussions there and the report expected to result from it is sure to provide a good background for all Museums in India making plans for the expansion of the educational aspects of their work It will, moreover, be useful preparation for the more intensive study the UNESCO International Seminar will carry on

What are the next steps that India itself can take in encouraging and developing education in and by museums? Achievements in other countries can be studied for suggestions However, it must never be forgotten that simple transplantations and imitations, even of outstanding successes elsewhere, are rarely successful In India, Indian ways and means must be found to meet Indian needs and conditions Accordingly, reference to a few leaders in excellence, a few obvious needs, a few opportunities in India can be reviewed here as a point of departure for further developments and as indications of what more thorough study can provide in guidance

A recent example of outstanding excellence in a difficult field is the National Children's Museum, New Delhi Children's museums, children's sections in adult museums, in all countries, though they already have a history of almost half a century, have remained a problem Too often they are repositories of miscellaneous objects, of minor educational interest, of indifferent quality, of no significance and of little coherence, used as a focus for hobby clubs, and for miscellaneous craft and recreational activities Admittedly such "museums" keep children busy Sometimes they do give a possibility for individual development and they keep youngsters off the streets But do they do much more? Museum leaders and educators in all countries have long been troubled by this question It would seem, citing the National Children's Museum as an example, that they can play a truly valuable role in education But their doing so depends on an informed leader, a carefully prepared and trained staff, clear-cut objectives, enlightened understanding of educational techniques within the scope of the museum's programme, and good liaison with educators All this the National Children's Museum has been able to do It has demonstrated what it offers for general education in its fine exhibition on early man in India, and for Art education in its Touring Art Carnival Obviously what it has been able to accomplish in little time would have been impossible except for unusual resources On the other hand, cannot an equivalent quality be attained on a more limited and modest scale by clear thinking about aims, by marshalling resources available and by applying well thought-out methods? It would seem so

Outstanding among community needs which museums might meet is some programme for the general public, in museums of all kinds, comparable in quality and intention to that demonstrated for children by the National Children's Museum Can such a programme

be devised? Museum leaders here must consider this question Will a general programme ideally conceived, serve for all? Probably not Certain principles can guide, can stimulate, can prompt to action, can set norms of quality, can indicate possibilities But each museum must find its own pattern, in relation to its scope, its general aims, its resources in personnel and in other respects and, above all, in relation to its community and that community's needs and aspirations Where there is no children's museum it must give thought to that public as well as to the adult groups it serves Even where there is a children's museum the larger general museum has its duties to education A children's museum can hardly provide the complete educational assistance required by schools and universities For example, no children's museum, even that in Delhi, can substitute for the survey of archæology and art provided by even a moderately rich museum, with such collections, almost anywhere in India Therefore, even when there is the best possible children's museum in a community the traditional museum is also needed, the educational services and programmes which it alone can offer are needed for children as well as for all other segments of the community

In India, a nation rapidly spreading education, bringing into its body of citizens rural people, disadvantaged people in one way or another, seeking the threads of unity binding together into a nation the peoples, regions, languages of a highly diversified and large country, the museum, representing as it does the personality of this land, as expressed in art drawn through a long tradition, has a major contribution to make The fact that what it exhibits in its halls represents a point in time, in a tradition still living for the majority of people, makes its task of communication easier than for many museums abroad For example, the superb examples of Greek sculpture in the British Museum are museum objects, art objects, with a general cultural message, but with no intimate association with the Londoner and his land In the National Gallery at Trafalgar Square even the British school of painting is probably a much less personal communication to the London public than, say, the bronze gallery of the National Museum, New Delhi, to its Indian public

A pattern of general educational services in museums beyond that already in use—attractive, well organized, reaching out to the entire community—is required for India Guide lecturers, occasional illustrated lectures, motion picture programmes on monuments and the arts, well arranged and labelled exhibitions are already a good beginning here What are the next steps? What shall they be, for the town dweller, for the child, for the villagers that come into the city on a holiday? For each one there should be a special offering, a way to help him understand better, enjoy more what he sees in the galleries, with something left over from what he has learned, about seeing and appreciating a work of art, or from understanding a fact of nature or a principle of science, for him to take home to his daily life How can that be done? What shall it be?

This public in rapid development, changing inevitably to some degree its ancient ways of life, entering into a modern technological society and adjusting to it, for good or ill, but necessarily very fast, offers innumerable opportunities to the museum Such a public, dazzled by the gadgets of contemporary industry, can fall easily into the error of dismissing the ancient arts and handicrafts as without value Every day a fine metal vessel or a good clay pot is discarded in favour of a plastic recipient, usually ugly, expensive, but novel, utilitarian and convenient Seeing fine things of the past honoured in a museum should induce respect—not possibly to the point of reversing the trend by replacing a thermos jug with a *surahi*, but at least to the stage of fostering an appreciation of the elegant form of a good *surahi* and encouraging the treasuring of fine old things as works of art A museum too, in its undeviating standards of truth and quality, can present a peak of excellence for the community Always clean, always orderly, exact and truthful in its labels,

it offers an example Few institutions of contemporary society can match it in this respect But it is in what the museum can do to enrich innumerable fields of study that must be counted the most challenging opportunity of all open to it Whether it is art, sciences, history, social studies, geography, the museum can provide something helpful But both museum staff and educators must give thought to how this can be done effectively Students need hardly to be considered, for if they are provided with an avenue of using visual material, in original, in the museums, they will respond for they will learn with more enjoyment and speed For the general public, for the adult to be served in the form of continuing and adult education, a means to provide illumination of all aspects of his life, and ways to achieve the same pertinency and value for him, must be found so that what he sees and learns in the museum comes to have meaning in his daily living, and contributes to it

In the natural science museums and in those of pure and applied sciences and of technology, the opportunities for both formal and informal education may be considered to be still greater They are more specific, more focussed, and have great importance in contemporary technological societies

The theme of museum education is not new But possibly the urgency, the concerted drive to help museums help themselves in fulfilling their entire obligation in education, which ICOM and UNESCO and the Museum Association of India all are concerned with, is new What many have whispered is now being said aloud everywhere museums belong to the people , they serve everyone Museums, therefore, need not fear that there is no more to do, even when they have passed through a hundred *successful years The Nagpur Museum, with* its many-sided collections and its successful programme, active over a long period, can look forward to starting its second hundred years with a challenge What more does Nagpur need from its Museum ? What more can the Nagpur Museum do for its community, for its State, for the Nation ?

The Display and Installation of Museum Exhibits

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Display, or installation of exhibits in Museums is the process of placing objects on exhibition and is one of the most important functions of the Museum In former years very little attention was paid to the aspect of display in Museums, and consequently most of the older museums were dusty places overcrowded with objects arranged clumsily in old-fashioned cases which had very little æsthetic appeal and much less educative value But in recent years a great change has come about in museums all over the world, and people everywhere are increasingly realizing the value of good, systematically planned displays in the museum galleries The need for effective and well-arranged displays has naturally necessitated careful selection of the material to be exhibited, and the modern trend in museums is, therefore, to select only the best objects in the collection for display purposes and to keep all the rest of the collection as reserve or reference collection, or to utilize some of them for lending or other educational purposes The term "Display" or "Installation" in Museum parlance, includes everything from the decoration of an exhibition room and the layout of its contents to the smallest detail in the placement of any single object and is, therefore, a very comprehensive field in which the curator, the designer, the artist and the carpenter—all have their respective parts to play The effectiveness as well as the educative value and popular appeal of an exhibit depends very largely on the mode of display or installation and the modern museologist should, therefore, bestow serious attention on this aspect of his work

Aims of display

An installation or display in a museum may be made with either one of or both the following purposes in view the first is to present objects pleasingly to the eye, the second, to utilize objects as means of conveying information Since a work of art is created to make its own appeal, most art exhibits are installed with the first purpose largely in view, and are, therefore, tastefully arranged, with controlled lighting, appropriate colour scheme and a minimum of labelling On the other hand, an object of History or Science is incapable of telling more than a very small part of its story and, therefore, most of these subjects are installed with the second purpose chiefly in mind, and are, therefore, displayed with due regard to their systematic arrangement and are supplemented by full labelling and the use of diagrams, charts and other means of visualizing ideas However, in practice, both purposes, *i e*, to display and to instruct, may enter largely into the installation of every object in the museum in varying degrees, and the need for today in most museums is, generally, more attractive installation of science objects and more instructive installation of art objects

General Principles Underlying Display Elements of Design

In any display of museum objects, the principles of design should be observed, whether the exhibit is primarily intended to please the eye or to convey information The three major qualities of good design are harmony, balance and rhythm This is achieved by a judicious use of symmetry and by placing objects of greater weight and interest in the centre and adjusting the other parts to the whole so that there is unity of idea, form and colour in any particular display Rhythm is secured

by even spacing, or if units of two or three kinds are involved, uniform alternation gives the same result, and if all units of a series are unlike, progressive arrangements by size or some other characteristic gives the best results In exhibiting natural history specimens, especially, in systematic display, however, the fundamental relationships and the natural systematic order should not be lost sight of in trying to adopt a balanced or harmonious arrangement which is more easily adopted in the case of the display of art objects, etc

Casing of Museum Objects .

There is infinite variety in the design of modern show-cases in museums and the type of casing depends on the nature of the exhibits Small ivory or wooden sculptures, or bronze or terracotta figurines, metal-ware, etc , will require suitable show-cases for their safe and effective exhibition and the best type of cases for such exhibits are perhaps the modern, built-in-single-glass fronted, shelfless cases with concealed internal colour scheme, with the objects attached directly to the background or exhibited on suitable small ledges or display blocks and pedestals at different levels In the Madras Museum, several galleries have been modernized recently by the installation of such built-in, internally illuminated cases and the results have been extremely effective Of course, there are other types of show-cases, such as, for instance, the Centre cases and table cases which may be suitable for certain specialized types of objects, but as a general rule, the type of display that produces the most pleasing impression is that of vertical exhibition in built-in wall cases

Placement of Objects

It must be remembered that, unless objects are placed so that one may see them without stooping or straining oneself, visitors suffer from so-called museum fatigue The design of cases is therefore an important factor, wall cases with low bases and high tops and table cases with high or wide decks are undesirable The eye-height of the average adult is 60 inches For ordinary inspection, the eye should not be more than 18 inches from its object This defines a zone between 42 inches and 78 inches levels as the most suitable for vertical installation of small objects But as this is too high for children, perhaps, the best plan is to install small objects and labels between 40 and 60 inches

Case Lining

As proper background counts a great deal in good museum exhibition, the opaque decks and backs of show-cases against which objects are viewed are usually covered with some suitable material to ensure a uniform background without cracks, holes or crevices In the modernised cases installed recently in the Madras Museum, the interiors have been lined with plywood and the plywood spray-painted to the required colour scheme before installing the objects, but it is also the usual practice in many museums to cover the interior of cases with suitable fabric This improves the appearance and may also provide a surface which is very little damaged by screws, nails and pins A coarse cloth, with wide-meshed texture is generally the best In the British Museum, Benvie cloth of dull grey, buff or cream colour is often used for lining cases For general purposes, a natural straw colour or grey is preferred, but dull uniformity throughout a musum is to be avoided Case lining of the same colour as the wall covering of a gallery is sometimes used, but in any event, it should be subdued in tone and should not clash with the surroundings For special purposes, such as small figures of ivory, bone or horn, or lace, gem-stones or gold and silver coins, etc , velvet lining of suitable contrasting colour such as dark green, black or maroon is sometimes employed with special lighting and the effect of such a display is often very pleasing Bronze images sometimes stand out well against a background lined with a plaited curtain of silk or velvet to enhance the display in special cases, and to heighten their æsthetic appeal

Shelves

The modern tendency is to do away with shelves of any kind altogether, and to attach objects directly to the vertical surface of the background in show-cases, but if shelves have to be used, they should be rather narrow, and

those at the top should be narrower than those at the bottom. Thick plate glass shelves (¼" thick) with ground edges are sometimes used in modern cases with stainless steel supports, as they do not interfere with the uniform illumination of the case.

Colour Schemes

Most of the up-to-date museums in the West owe a large measure of their attractiveness to the splendid colour schemes which they adopt in the interior decoration of their galleries. It is customary to select a distinctive colour scheme for each gallery in the Museum, each different from the other, so that the visitor, in passing from one gallery to the next, might experience a welcome change in the colour of his environment. Such a device thus minimises museum fatigue considerably by breaking up the monotony and thus sustains the interest of the visitor throughout his rambles through the various galleries. Generally, the colour of a particular gallery is so selected that it would be appropriate to the nature of the objects displayed therein. Thus pale green, suggestive of a habitat of green foliage is suitable for the bird gallery, while pale blue, suggestive of a marine habitat may be adopted for the fish and marine invertebrate galleries. A buff, or pale earthy brown colour, suggesting a terestrial habitat may be suitable for a gallery of mammals. The entire surface of the walls in the interior of the galleries is uniformly painted with the particular colour selected for the gallery. This colour should be soft and subdued, and the interior of the cases should also be so painted or lined with coloured cloth so as to harmonize with the general colour scheme of the gallery.

Lighting

It is most essential that museum exhibits should be presented so that they can be viewed in the best light possible. No museum attempting to modernise its galleries should be without the aid of artificial illumination. The great advantage of electric lighting is that it can be controlled according to the effect desired, and at the same time it makes it possible to do away with excessive glare of natural light in the Museum galleries. In the case of sculptures, artificial light, if properly used, and if it is directed from the correct angle, helps to admirably highlight all the artistic features and iconographic details. In modernised galleries, in which the general lighting is subdued, very pleasing effects can be obtained by a judicious use of good fluorescent lighting from a concealed source and in built-in cases the internal lighting should be sufficiently strong to provide adequate illumination of even the smallest objects and to prevent unsightly reflections on the exterior of the glass fronts. Occasionally spotlighting of certain important sculptures and other outstanding exhibits by means of special incandescent lights may be very effective in focussing the attention of visitors on those special exhibits. In Natural History dioramas, of course, internal concealed lighting is indispensable, and very spectacular effects may sometimes be obtained by skilful and controlled use of lighting. It is interesting to note that all the great habitat groups in a gallery may not be uniformly illuminated. The lighting is varied according to the nature of the scene depicted. For instance, in a scene portraying sunset, the general lighting of the group is greatly subdued, but a specially strong ray of light is directed towards the glowing, crimson, painted picture of the setting sun over the hills in the background, and where a moonlight scene is intended, fluorescent lights shaded by blue and green glass produce a remarkably pleasing effect.

Having outlined the general principles of Museum display, I may now very briefly indicate the lines on which museum objects of different specific categories such as archæological, natural history, ethnological and other types of collections may be best arranged and presented in modern Museum galleries.

Archaeological Collections

The modern trend in exhibiting large archæological objects such as sculptures, bronzes, etc., is to exhibit them exposed on neat modern wooden pedestals of suitable height in a spacious gallery, well spaced out and adequately illuminated. Suitable backgrounds may be used wherever desirable, but very often

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one misses the iconographic details on the back of a fine bronze or stone sculpture if it is displayed in a show-case or close against a background panel or against the wall. Such sculptures should, therefore, be exhibited centrally with space all round to allow being viewed from all angles. Small objects such as terracottas, pre-historic antiquities, etc., should, of course, be displayed suitably in vertical built-in show-cases with concealed lighting. It must be remembered that sculptures in stone, bronze or wood often formed part of a monument such as a temple, stupa or a temple car and that we are taking them out of their proper context when we try to exhibit them in the museum gallery. It is, therefore, essential to give the visitor an idea of the proper context from which they were taken, by way of photographic enlargements or miniature reconstructed models of the temple, stupa or other monuments from which they were originally derived. This will serve as a useful introduction to the sculptures and will help the visitor to appreciate them better. Other visual aids such as maps and plaster replicas may also be employed to a limited extent to make the story of the sculptures complete in their gallery setting.

The arrangement of sculptures and other archæological objects in the Museum gallery is also an important matter and should be thoughtfully planned. A chronological arrangement, planned to show the evolutionary sequence of the various styles and schools of sculptures, paintings and other antique art objects is probably the most effective and instructive way of treating archæological exhibits so that they may tell a connected story and thus effectively reflect the past glory of India's rich cultural traditions. In certain galleries, however, sculptures may be arranged according to their iconographic types or on regional basis. The essential point is that the material should be presented in some meaningful sequence and should be able to tell the entire story of India's rich cultural heritage by the very logic of their arrangement.

Natural History Collections

In modern Natural History galleries, or in Natural History Museums, where the whole Museum is devoted to Natural History, such as the American Museum of Natural History, New York, certain distinct types of display or arrangement of objects, are adopted. They are—(1) Systematic or classificatory displays in which the animals or plants are arranged in their natural systematic order, illustrating their classification and fundamental relationships, (2) Structural displays, in which the structure of animals and plants are illustrated especially in relation to their habits and mode of a life by means of actual specimens, models and photographs, (3) Thematic displays in which selected specimens, models, charts, etc., are arranged, grouped and displayed so as to illustrate certain specific themes in biology, such as Evolution, Mimicry, Variation, Flight, Migration, etc., (4) Displays showing physiological processes, in which certain vital life processes are graphically illustrated such as movement, breathing, feeding, reproduction, etc., in animals, (5) Displays showing Economic aspects, that is to say, the exhibits are arranged so as to show the animals and plants in relation to man, and (6) Displays showing Ecology, that is to say, animals in their natural environment. These exhibits are termed Habitat groups or Dioramas and can be extremely instructive and attractive, if properly prepared and installed. The animals and plants are set in a modelled foreground against a panoramic painted background in a huge, roomy case with a deep, curved background panel and powerful concealed internal lighting. The result is dramatic and makes Natural History most appealing to the visiting public.

Ethnological Collections

Ethnological objects in Museums may be most varied and may include a large and miscellaneous assemblage of objects such as ornaments, clothing, models of primitive dwellings, weapons, musical instruments, animal traps, etc. These can be arranged and displayed in a most meaningful and instructive way if they can all be properly grouped, correlated and exhibited in their proper setting along with enlarged photographs and bust models of the corresponding tribal folk. The material culture of the tribes may thus be graphically

demonstrated in the Ethnological galleries by actually showing the models of the tribal folk wearing their clothing and ornaments, using their weapons or playing their musical instruments. Actual dioramas may also be constructed with a painted panoramic background showing the original setting of the tribal communities. In the recently modernised Ethnology galleries of the Madras Museum the material culture of the various South Indian tribes such as Todas, Kadars, Mudugas, Gadabas etc., are graphically portrayed by a proper grouping of the relevant exhibits in deep, built-in illuminated cases. In the Anthropological galleries, similarly, the story of prehistoric man may be told vividly by the proper grouping of the stone implements he used, and by introducing models and painted backgrounds to show the way he used them, the manner in which he hunted animals and gathered food, the manner in which he made fire and other such primitive activities.

Numismatic Collections

As Museum exhibits, coin collections often pose a serious problem, as most of them, especially, the gold and silver coins, are extremely valuable and are likely to be stolen if exhibited in the public galleries, in spite of the most stringent precautions. However, a selected series of coins may be exhibited in special burglar-proof cases with thick unbreakable plate glass fronts and strong locking devices. The coins may be attractively displayed in special shallow sockets against dark, maroon, black or dark green velvet case-lining vertically in modernised cases with internal concealed lighting. To see both the obverse and reverse of the coins they may be mounted between plastic sheets on special revolving frames. Sometimes they may be placed on glass sheets in desk cases and a mirror placed beneath to show the under surface. Coins may be effectively and instructively arranged to illustrate the entire history of Indian coinage from the earliest times, if properly selected and labelled. Plaster casts and electroplated metal casts of coins may also be freely used in Numismatic displays, especially to fill up gaps in a historical series and to complete the sequence.

The Introductory Case

In modern museums, very often an Introductory case, or even a small Introductory Gallery is installed at the entrance to the various main galleries, introducing the visitor to the contents of the gallery. This is very helpful. The exhibits in this Introductory section should aim at giving a broad idea or bird's eye view of the objects exhibited in that gallery, as a whole, by means of selected exhibits, charts, diagrams and models to explain the salient features of the contents. Normally, such an Introductory exhibit should start with a specimen or a model which should answer a question such as, for instance, "What is a Reptile" ? or "What is a Bird ?" in the Reptile or Bird Gallery respectively or "How old is our earth" ? in the Geology Gallery. As this Introductory section will necessarily have to give the gist of the contents of the entire gallery in a nut-shell, much thought should be given to the careful selection and arrangement of the exhibits, labels, and photographs, the object being to stimulate the interest of the visitor in what he is about to see in the entire gallery and to egg him on to greater curiosity.

In conclusion, I would like to stress that one of the modern trends that is being universally observed to-day in Museums is a change from a case crammed with specimens or the "open storage" of the past to one containing a relatively small number of well chosen, properly labelled specimens. This simplification is an important consideration in the design of the conceptual or mono-thematic exhibit which is becoming increasingly popular in museums to-day. This encourages the visitor to pause and think about the content. Emphasis has switched on to the interpretation of the facts from a mere accumulation of facts. It is time, therefore, for Indian Museums to re-orient themselves to cater to this new and realistic approach to the problem of Museum exhibition.

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Natural History in Indian Museums

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MUSEUMS are no longer considered as places where strange collections are housed simply to arouse curiosity and surprise in the onlookers The objects presented in the galleries should make a potential contribution to the visitors in imparting knowledge through exhibitions that are properly conceived and executed A Natural History Section, in particular, has to be devoted to the demonstration of themes and scientific theories in an interesting and intelligible manner One should be able to obtain a new insight and a new understanding of Nature rather than see an array of specimens piled up in the galleries The ideal for a Natural History Museum or a section devoted to Natural History in a multipurpose museum, therefore, should be the interpretation of Nature rather than its mere presentation

Looking at the condition of Natural History collections in Indian Museums, from this point of view, one has to confess that the state of affairs is far from satisfactory As early as 1936, Markham and Hargreaves in their Report on the Museums of India have pointed out the deplorably poor standard of Indian Museums in general and Natural History sections in particular The conditions have changed very little since, excepting in a few museums where attempts have been made to modernise the sections

The development of Natural History sections in Indian museums did not follow any definite pattern of growth from the organisational point of view The first Natural History section was organised in Calcutta under the honorary curatorship of Dr Wallich, a Danish Botanist, in the year 1814 The Bengal Natural History Society and the Bombay Natural History Society were responsible for establishing the Natural History Museum, Darjeeling and the Natural History Section in the Prince of Wales Museum, Bombay, which took their final shape in the years 1938 and 1923 respectively Several Colleges and Universities have developed reference collections for teaching purposes Collections of importance were also made in museums at Madras, Trivandrum, Bangalore, Nagpur, Lucknow, Baroda and Patna. Many museums devoted primarily to Art and Archæology contained miscellaneous exhibits of varied kinds and Natural History specimens also found their place amongst them Such collections mainly comprised mounted animals like tigers, lions, birds, etc , acquired by the local princes or rulers who were interested in game and who patronised the museums

Many of the rich collections in the Natural History Museum, Darjeeling, Indian Museum, Calcutta, Prince of Wales Museum, Bombay and the Government Museum, Madras are the results of the work done by enthusiastic naturalists who devoted time and energy to the study and enumeration of the flora and fauna of the then British India Most of them were Europeans and their contribution towards the development of Natural History collections in India should be gratefully acknowledged The classic volumes of the *Flora and Fauna of British India* bear testimony to the ceaseless efforts of these

naturalists whose work has laid a foundation for Taxonomical studies Notable contributions were also made by the Zoological, Botanical and Geological Surveys of India in the development of collections, which are mostly housed in the various sections of the Indian Museum, Calcutta

The collections thus formed at different centres remained more or less static for years together and till today in many cases Explorations and field trips which are essential for the growth of any Natural History collections were seldom undertaken With a general predominence of systematic or classificatory display they existed as mortal remains of the living world, excepting at a few museums where dioramic displays found their place Even where rich collections existed, due to lack of care and improper methods of preservation various agencies of deterioration had easy access to them and irrepairable damages have been done It is pitiable to see such damaged and mutilated specimens on show in certain museums of our country, even today Age old specimens even of common birds, reptiles and mammals showing a very poor standard of Taxidermy—"stuffed" in the real sense of the term—which are presented in the galleries of these museums look nothing but outright libels against Nature Such birds like maina, parrot or blue jay are so common in our country that the replacement of those mutilated specimens do not call for much effort Disfigured and denatured Biological specimens have no value in a museum collection, unless they are type specimens belonging to a rare species They are in no way comparable to a deteriorated painting or a defaced sculpture which may have historical or antiquarian value We have an immense wealth of natural resources—flora and fauna—in and around our country The three oceans that surround our vast sub-continent is rich in innumerable varieties of marine creatures and the wide-spread frontiers that include the Himalayas and the luxurious rain swept forests of Assam and Kerala have an unmatching variety of animals and plants Not even a fraction of this immense wealth of Natural History resources are represented in our museums

Modernising or reorganising a Natural History collection should not merely consist in the introduction of dioramic display in place of the systematic collections, which is now found as a common trend in our museums A word of caution, in this connection seems necessary It is true that habitat group cases and dioramas attract the attention of the visitors and arouse interest in them But the work of preparing such cases very often falls in the hands of an artist who executes the background painting and the foreground modelling and a Taxidermist who prepares the specimens Many of them often become unnatural and unscientific representations, however pleasing to the eye they may be from the aesthetic point of view Dioramas and habitat group cases should be used to represent ecological themes, the execution of which require an intimate study of the habits and habitats of the animals and plants in question and their inter-relationship, which involves scientific study and understanding

Only a few museums in the country have been able to attain any considerable amount of success in improving the methods of presentation The Natural History Section of the Prince of Wales Museum was reorganised in a very attractive and useful manner introducing a number of dioramas and educative displays, eliminating congestion and introducing clarity in exposition Since the collections have been reorganised, the section has remained more or less static with no further additions, improvements or activities, but for which, it can still be considered as one of the best Natural History Galleries in India from the point of view of presentation

Many of the sections in the Indian Museum, Calcutta, have also been reorganised The Natural History collections of this museum, though the richest in numerical greatness, has still to achieve a satisfactory condition as far as display is concerned

The Government Museum, Madras, which also has a very rich collection of Natural History materials is perhaps the one that could be credited with active reorganisation in the recent years The various sections are gradually

being reorganised on scientific lines and the museum has numerous publications to its credit

The only museum in the country devoted entirely to Natural History is the Natural History Museum, Darjeeling It has a representative collection of the fauna of Darjeeling, Jalpaiguri, Sikkim, Tibet, Nepal and Bhutan This is an excellent example of a Regional Museum of Natural History in India, though of course, the museum has still to develop sections of Botany and Geology The flora and fauna of this region is extremely rich and exquisite providing adequate opportunities for the future development of the museum A bi-annual journal under the name "Journal of the Bengal Natural History Society" is being published from this museum, under the auspices of the Bengal Natural History Society

The excellent work of reorganisation done at the State Museum, Lucknow, deserves special mention here With a series of built-in cases with internal lighting and false ceilings, the section is a good attempt in presentation The display has an overall bearing on evolutionary sequence and represents the different phyla of the animal kingdom with the use of suitable examples, models, charts, diagrams, and orignal specimens The display, though has a bearing on dioramic principles, has cleverly eliminated background paintings, by introducing suggestive methods of showing habitats with the proper use of the foreground These could be called as semi-dioramic displays The attempt is a welcome innovation in the presentation of Natural History materials More attention could have been paid to provide proper ventilation so as to avoid stagnation inside the sections and some of the old specimens could have been replaced

The various other State Museums in the country which also have some sorts of Natural History collections have suffered neglect on the part of the curators concerned and many of them still are in a sub-standard level Numerous examples of unsatisfactory displays and unnatural representation of nature could be cited from the Museums at Baroda, Bangalore, Jaipur, Patna, Trivandrum, etc Adequate finances are, of course, necessary for the reorganisation of any section in a museum But the customary excuse of lack of funds and inadequacy of space are not always acceptable Attempts could still be made to do the maximum possible within the available resources and that is what is predominently lacking in many of our museums This, combined with neglect or carelessness on the part of the curators and lack of properly trained personnel could be regarded as the chief reasons for the backwardness of our museums, whichever field of art or science they represent

The future growth of Natural History sections in our museums largely depends on this understanding on the part of their organisers coupled with a proper knowledge of the various ways and means through which the interpretation of Natural Sciences could be done The displays should not be restricted only to the elucidation of the numercial greatness or the amazing variety of flora and fauna Taxonomic or classificatory display tends to give an artificial, heavy and over-crowded character far from giving a clear faithful picture of nature and results in a lifeless arrangement instead of a satisfying portrayal of the living world Systematic display, no doubt, is important but the majority of such collections should find place in the reference or study collections For public displays, intended to show systematic or evolutionary aspects of the plant or animal kingdom, only selected specimens belonging to each group need be employed

Display or presentation in the Natural History sections should represent the various aspects of the study of Natural Science Taxonomy and Ecology should find a place amongst them rather than having an undue predominence It is not intended to discuss here the different methods of presentation It may, however, be mentioned that displays should centre around various themes such as mimicry, camouflaging, adaptations, symbiosis, commensalism, parasitism, breeding habits, parental care, courting habits, migration and such other aspects of animal behaviour, similar themes representative of plant life, evolution in plants

and animals, structural or physiological aspects of biology, genetics and heredity, economic aspects of Natural Sciences or the relation between man and nature, geological themes and so on. Innumerable examples could be drawn for this purpose and there are endless possibilites in representing nature in various vivid and instructive aspects through museums. The importance of building up a collection of local fauna and flora as distinct from the general collections should also not be overlooked.

Representing Natural History for the benefit of children have not been given any due consideration in the majority of our museums. Children have an inborn curiosity to know about the nature around them. Properly conceived natural history displays go a long way in promoting their understanding of the Natural Sciences and help in developing a scientific outlook in them. A few noteworthy examples of representing fables and animal stories through exhibits are shown in the Nagpur Museum. Stories such as the Fox and the Crow, Cats and the Monkey, Crane and the Fox are skilfully represented using actual specimens. Such exhibits are good examples of visual communication. The Government Museum, Madras also possesses some well planned exhibits for children.

Research is another neglected aspect in the functions of our museums. One of the most fundamental and basic functions of a museum is research. Without this basic foundation of scholarly research all the other activities of the museum tend to become mere showmanship. The enormous amount of research done in and the publications that have been brought out by some of the great museums of the world are extremely remarkable and such work has laid down the foundations of the study of Natural Sciences. Extensive reference collections are essential requirements for biological research. To cite some examples, the British Museum (Natural History) has a collection of about 17,000,000 specimens of insects and the Museum of Comparative Zoology at Harvard has a collection of about 10,000,000 specimens of shells. Although museum research in the classical sense deals only with systematics, the concept today is much broader than the mere preparation of descriptive catalogues. A Natural Science Museum should undertake field explorations, conduct ecological and behavioural studies in biology and research in any branch of Natural History which could throw more light on any sphere of knowledge regarding the collections. Research is also wanting in evolving better methods of preservation and presentation.

It is needless to say, in view of the above considerations, as to how underdeveloped and unsatisfactory the present conditions are as far as the Natural History sections in Indian museums are concerned. Our museums show a great paucity of collections in spite of our rich resources. The existing sections need proper reorganisation and more and more museums of our country should give fuller representation of Natural History. The Government and the Museologists of the country should take increasing interest in developing this field of museum work. It is encouraging to note, in this context, that the Central Advisory Board of Museums in their last meeting held at Lucknow have pointed out the advisability of organising a central museum of Natural History.

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PLATE A

टकाचोर (कोत्री) Bengal Treeple

पोपट Parrots

Birds in the Gallery of the Central Museum, Nagpur

Inscriptions in the Museum

Dr V V Mirashi, M A , D Litt

THE Museum contains a large number of lithic and copper-plate records obtained from the different parts of the former Central Provinces and Berar Some of these were brought to Nagpur even before the establishment of the Museum in 1863 Richard Jenkins, who was Resident at the court of the Bhonslas from 1807 to 1826, was interested in the ancient records of this Province He sent Vinayakrao Aurangabadkar, who was in his service, to different places in Chhattisgarh to decipher if possbile and to make a list of inscriptions found there From the report of Aurangabadkar now deposited in the India Office Library, Jenkins sent an 'Account of Ancient Hindu Remains in Chhattisgher' published with translations and observations by H Wilson, Secretary, Asiatic Society of Bengal, in the *Asiatic Researches*, Vol XV (1825), pp 499 ff Jenkins probably caused some stone inscriptions to be brought to Nagpur As no proper record was kept of these inscriptions, their find-spots were uncertain and they were conjecturally relegated to certain places and have consequently caused considerable confusion, which in some cases has persisted to the present day [1] In some cases I have tried to remove the confusion with the aid of Aurangabadkar's report, from which relevant extracts were supplied to me by Dr Y K Deshpande, who copied them in England some years ago Major Wilkinson, who, like Jenkins, was interested in the ancient records of this Province, also caused some records to be brought to Nagpur, of which also no accurate information was preserved [2] All these inscriptions were later deposited in the Nagpur Museum after its establishment in 1863, but no attempt was made to ascertain their original provenance Later, many more lithic and copper-plate inscriptions as well as coins were brought to the Museum from different parts of the Central Provinces and Berar and deposited in the Museum In 1917 Rai Bahadur Hiralal published *Descriptive Lists of Inscriptions in the Central Provinces and Berar*, which listed and described 243 inscriptions (Of these 17 were stone inscriptions, 16 statue inscriptions and 12 copper-plate grants deposited in the Museum) This number swelled to 314 in the second edition of the work published by him in 1932 (Of these 25 were stone inscriptions, 12 statue inscriptions and 19 copper-plate grants deposited in the Museum) Some additions have been made during the last twenty-two years A new edition of Hiralal's List is now called for After the reorganisation of the States, sixteen records (six inscribed on stones and ten on copper-plates) have been removed to the

1 See e g the case of the stone inscription of Bhavadeva The Museum records relegated it to Ratanpur and so it was designated in Kielhorn's article in *J R A S*, 1905 p 617 Hiralal thought that it belonged to Bhandak as conjectured by Cunningham in his *A S R*, Vol IX, p 127 This has led to some misconceptions about the territory under the rule of the Somavamsi king Nannaraja in the article on the Senakapata inscription by Dr M G Dikshit and Dr D C Sircar (*Ep Ind*, Vol XXXI, pp 31 f) As a matter of fact the inscription originally belonged to Arang near Sirpur in the Raipur District of Chhatisgadh I have published an extract from the Report of Vinayakrao Aurangabadkar in my Note on the Senakapata inscription (*Ep Ind*, Vol XXXIII, p 253) Aurangabadkar summarises the contents of the inscription found at Arang which should leave no doubt that it is identical with the stone inscription of Bhavadeva, wrongly attributed to Ratanpur and Bhandak

2 See e g the large stone inscription containing the *prasasti* of the rulers of Malwa, the provenance of which is discussed below It was relegated first to Amarakantak, and then to Bilhari, but Aurangabadkar's report shows that it belongs to Bhandak

Raipur Museum Still the number of records left in the Museum is quite large As inscriptions form an important source of the ancient history of India, it is proposed to give a short account of the main records deposited in the Museum.

The Mauryas—The oldest record in the Museum is that inscribed on a large slab of stone found at Deotek in the Chanda District It was first noticed by Beglar in Cunningham's *Archaeological Survey Reports*, Vol VII, pp 123—125 Cunningham published an eye-copy of the two records incised on the slab and gave his readings of them in the *Corpus Inscriptionum Indicarum*, Vol I (First Ed), pp 28-29, but he could not interpret them They were first edited with facsimile plates by me in the *Proceedings and Transactions of the Eighth Session of the All-India Oriental Conference* held at Mysore in 1937[3] As shown there, the earlier of the two records announces an order promulgated probably by the Mahāmātra of Asoka from Chikamburi, now called Chikmārā, a villge near Deotek It was issued in the fourteenth regnal year of Aśoka and proclaims that whoever would capture or slaughter (any animals) would receive condign punishment From the Rūpnath and other edicts of Asoka we know that he had ordered that his edicts should be engraved on stone pillars, rocks and stone slabs in the districts of his large empire, but the record incised on the Deotek slab is the only instance of its kind known so far and is, therefore, of great historical importance The other record on stone is of the Vākātaka age and will be noticed below The slab has now been removed to the Museum at my instance

Stone Inscription of Bhāgadatta—Of a somewhat later age is the inscription on the stone slab discovered by me at Pauni in the course of an exploration tour in 1937 It has also been edited by me in the *Epigraphia Indica*[4] It records that a king named Bhāgadatta established a *pādukāpatta* evidently at Pauni Bhāgadatta is described as the king of the Bhāras The latter may be identical with the Bhārasivas who are known to have flourished at Padmāvati (modern Padam Pawāyā in the former Gwalior State) If this identification is correct, the Bhāra tribe may have migrated to the north from Vidarbha The Pauni record may be referred to the beginning of the Christian era

The Kushānas—Two statues of the Kushāna period were found near the waterfall of the Narmadā at Bhedāghāt They are now built into the pillars of the porch of the Museum The inscriptions on them are indistinct and have not yet been edited They are supposed to have been installed by the daughter of Bhuvaka or Bhumaka, who has been identified with the Kshatrapa Bhumaka[5] Both the reading and the interpretation of this record are uncertain

The Vākātakas—The Vākātaka dynasty was the most glorious dynasty that ruled over Vidarbha in ancient times Its earliest capital Nandivardhana is modern Nandardhana, about twentyseven miles from Nagpur Its later capitals Pravarapura, Padmapura and Vatsagulma (identified respectively with Pavnar, Padampur near Amgaon, and Bāsim) are also situated in Vidarbha It is not, therefore, surprising that several records of this royal family should have been found in Vidarbha Some of them have been deposited in the Museum

The earliest record of the Vākātakas is that inscribed on the aforementioned Deotek slab It belongs to the reign of the Vākātaka king Rudrasena I and records the construction of a *Dharma-sthāna* or temple, evidently, of his *ishta-devatā* Mahābhairava Rudrasena chiselled off half of the earlier record on the slab, promulgating an order of the Mahāmātra of Asoka prohibiting the capture and slaughter of animals, and got his own record incised in its place This record is of about the middle of the fourth centrury A D[6]

3 pp 63 f The article is reproduced in my *Studies in Indology*, Vol I, pp 109 f

4 *Ep Ind*, Vol XXIV, p 11 f

5 *Arch Surv Rep* for 1918-19, p 33

6 Mirashi, *Studies in Indology*, Vol I, pp 114 f

Several copper-plate grants of the Vākātakas have been found in Vidarbha, of which four have been deposited in the Museum. Three of them belong to the reign of Pravarasena II, son of Prabhavātiguptā, who was the daughter of the illustrious Gupta king Chandragupta II Vikramāditya. The earliest of these is that recorded on the Siwani plates (plate I J) It registers the royal gift of the village Brahmapūraka, now called Bamhani near Kārañjā in theBhandara District. Its boundary villages were Karañjaviraka, Kollapūraka, Pavarajjavātaka and Vatapuraka which can be identified respectively with modern Kārañjā, Kulpā, Paraswādā and Vadgaon lying in the vicinity of Bamhani. The villages are described as situated in the Bennākarpara-bhoga, which was evidently a district comprising the territory along the bank of the Waingangā.[7]

The Tirodi plates found at Tirodi near Katangi in the Bālāghāt District of M P record the grant, by Pravarasena II, of the village Kosambakhanda, modern Kosambā, 6 miles to the south-east of Tirodi. This village is described as situtated in the western division (*aparapatta*) of the Bannākata (or the Waingangā District). The plates are dated in the twenty-third regnal year of Pravarasena II.[8]

The Pattan plates issued in the twenty-seventh regnal year of Pravarsena II deserve special mention, for they contain the name of the scribe Kālidāsa. This scribe cannot be identified with the great Sanskrit poet Kālidāsa, for the record is written very carelessly and contains numerous mistakes of grammar and orthography. Still the occurrence of the name in a record of the Vākātakas is interesting. It is now generally accepted that the well-known Sanskrit poet Kālidāsa flourished in the Gupta-Vākātaka age and there are good grounds for supposing that he visited Nandivardhana, the capital of the Vākatakas, where he wrote his lyric *Meghaduta* and helped Pravarasena II in the composition of his Prakrit Kāvya *Setubandha*.[9]

The fourth copper-plate inscription (viz the Durg plate) is incomplete, but it probably belongs to the reign of Narendrasena, the son of Pravarasena II. It was intended to be issued from Padmapura, modern Padampur near Āmgaon in the Bhandārā District where there are still some ancient remains. This place was the ancestral home of Bhavabhūti, the great Sanskrit playwright of Vidarbha.[10]

The Rāshṭrakutas of Nandivardhana.—After the downfall of the Vākātakas in the sixth century A D Vidarbha passed under a feudatory family which owed allegiance to the Kalachuris of Māhishmati (modern Maheshwar in M P). A copper-plate inscription of the reign of Svāmirāja, who probably belonged to the Rāshtrakūta dynasty was discovered at Nandardhan (ancient Nandivardhana) near Nagpur. It records two grants—(i) one of the village Ankollikā made by the king at Prayāga and (ii) the other of some *nivartanas* of land in the village of Chiñchapattikā made by the Gana (Corporation) of Mahāmātras (Elephant-drivers). Curious as it might appear, the seal of the grant has not the royal emblem but the figure of the elephant goad and the legend *Gana-datti* (a gift of the Corporation), which shows what power the Corporation of Elephant-drivers wielded in the State.[11]

The Parivrājaka Mahārājas.—This family was ruling over the Dāhala or Chedi country, comprising modern Baghelkhand, as feudatory of the Guptas. Their copper-plate grants have been found in Central India. One of these came into the possession of the Malguzar of Betul, now in M P. It belongs to the reign of king Sankshobha of the Parivrājaka family and is dated in the Gupta year 199 (A D 518). It records the grant of parts of two villages viz., Prastaravātaka and Dvāravātaka (modern Patpārā and Dwārā respectively) in the *vishaya* or District of Tripuri (modern Tewar near Jabalpur).[12]

The Kings of Śarabhapura.—These kings were ruling in Chhattisgadh in the sixth

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7 *Mirashi, Corpus Inscriptionum Indicarum* (C I I) Vol V, pp 28 f

8 *Ibid*, Vol V, pp 48 f

9 *Ibid*, Vol V, pp 57 f

10 *Ibid*, Vol V, pp 76 f

11 Mirashi, *C I I*, Vol IV, pp 611 f

12 *Ep Ind*, Vol VIII, pp 284 f

century A D Their first capital was Śarabhapura founded by king Śarabha, the progenitor of this family It has not yet been identified satisfactorily One copper-plate grant of this family is deposited in the Museum It was found in Raipur The plates record the grant, by the Śarabhapuriya king Mahā-Sudevarāja, of the village Śri-Sāhikā in the Pūrva-rāshtra or Eastern Country The village has been identified with Sirsāhi in the Baloda Bazar tahsil of the Raipur District (Hiralal, *Inscriptions in C P and Berar*, second edn , p 106)

The Somavaṁśis of Dakshina Kosala —The Somavaṁśis, also called Pānduvaṁśis, were ruling in Dakshina Kosala (modern Chhattisgadh) in the sixth and seventh centuries A D A copper-plate grant of Nannarāja, son of Mahasiva-Tivaradeva, of this dynasty, was found at Adbhāra in the Bilaspur District of Chhattisgadh It records the gift of the village Kontinikā (modern Kotmi) in the *vishaya* of Ashtadvāra (modern Adbhāra) The grant is undated, but probably belongs to the third quarter of the sixth century A D[13]

The Rāshtrakutas of Mānyakheta —The Imperial dynasty of the Rāshtrakutas of Mānyakheta (modern Mālkhed in the former Hyderabad State) ruled from circa A D 750 to A D 975 Several copper-plate grants of the family have been found in Vidarbha, of which four are deposited in the Museum Three of these belong to the reign of Govinda III, *viz* (1) the Anjanavati plate dated Śaka 722 (A D 800), recording the grant of Anjanavantī[14], (2) the Sisavai grant dated Śaka 729 (A D 807)[15] (Pl I 2) and (3) the Lohārā grant, dated Śaka 734 (A D 812)[16] All these have been edited by me in the *Ep Ind* While editing the last two, I fixed the chronology of the campaigns of Govinda III, which is now generally accepted The fourth grant was discovered only two years ago at Andurā in the Akola District The plates are dated in the Śaka year 851 (A D 929) and belong to the reign of Govinda IV They record the grant of Elauri (modern Yerli) on the bank of the Payoshni (modern Purnā), near Nandurā The grant is under publication in the *Ep Ind*

The Kalachuris of Tripuri —This was an illustrious family which ruled from Tripuri, modern Tewar near Jabalpur At one time its empire extended over a large part of North India and included the holy cities of Prayāga and Vārānasi Four stone inscriptions and two copper-plate grants of this family have been deposited in the Museum The earliest of these is the fragmentary stone inscription of Lakshmanarāja found at Kāritalāi in the Jabalpur District of M P It is of about the middle of the tenth century A D and records the construction of a temple of the Boar incarnation of Vishnu by Someśvara, the Chief Minister of king Lakshmanarāja, and the gifts of villages made in favour of the god[17]

Another stone inscription of the family discovered at Bilhari in the Jabalpur District is undated, but since it describes the Kalachuri kings from Kokalla I to Yuvarājadeva II, it may be referred to the last quarter of the tenth century A D It records the construction of a temple of Śiva under the name of Nauhalesvara and mentions the taxes in cash or kind which the manufacturers and traders had to pay at the town for the benefit of the temple and the *matha* attached to it The inscription contains at the end an interesting reference to Rājaśekhara, who, towards the end of his career, lived at the Kalachuri court[18]

One other stone inscription of the family is of the reign of Gāyakarnadeva and is dated in the Kalachuri year 902 (A D 1151) It records the construction of a temple of Śiva at Tripuri by a Pāśupata ascetic named Bhāvatejas[19]

The fourth stone inscription is of the reign of Jayasimhadeva, the last but one known king of the Kalachuri dynasty of Tripuri. It is dated in the Kalachuri year 926 (A D 1174-75) and describes several Śaiva *āchāryas* who were the spiritual preceptors of the Kalachuri kings of Tripuri It also records the construction of a

[13] Edited by B C Jain, *Ep Ind* , XXXI, pp 219 f
[14] Edited by Mirashi, *ibid* , Vol XXIII, pp 8 f
[15] Edited by Mirashi, *ibid* , Vol XXIII pp 204 f
[16] Edited by Mirashi, *ibid* , Vol XXIII, pp 212 f
[17] Mirashi, *C I I* , Vol IV, pp 186 f
[18] *Ibid* , IV, pp 204 f
[19] *Ibid* , Vol IV, pp 305 f

temple of Śiva under the name of Kirtiśiva to which king Jayasimha donated some villages[20]

Besides these stone inscriptions, there are two copper-plate inscriptions of this family in the Museum One of these is fragmentary, only one of the two plates being now preserved there A transcript of the second plate has also been preserved in the Museum, from which I have edited it in the *Woolner Commemoration Volume*[21] This copper-plate inscription belongs to the reign of Yaśahkarnadeva Its date, wrongly written as 529, was probably the Kalachuri year 836 (A D 1084) The purpose of the inscription was to record the grant of the village Kārañjā in the Jauli-pattalā (modern Jabalpur District)

The second copper-plate inscription is of Jayasimhadeva and records the grant, to a Brāhmana, of the village Agarā (modern Agariā in the Sihorā tahsil of the Jabalpur District) It is dated in the Kalachuri year 918 (A D 1167)[22]

The Kalachuris of Ratanpur and Raipur — A branch of the Kalachuris of Tripuri established itself at Ratnapura (modern Ratanpur in the Bilāspur District) It continued to reign there till the country was annexed by the Marāthās In the last quarter of the fourteenth century A D a branch of the Ratanpur family established itself at Raipur There are two stone inscriptions of the Ratanpur family in the Museum, one belonging to Brahmadeva, a feudatory of Prithvideva II, dated in the Kalachuri year 915 (A D 1163-64),[23] and the other to Vāhara, king of Ratanpur[24] The latter mentions the king's encounter with some Pathans

The Chālukyas of Kālyani —The Rāshtrakutas of Mānyakheta were overthrown by the Chālukyas of Kālyāni An inscription of the famous Chālukya king, Vikramāditya VI, dated in the Śaka year 1008 (A D 1087), is said to have been found by Cunningham at Sitābaldi, a suburb of Nāgpur, but from the account of Vinayakarao Aurangabadkar it seems to have been originally near the old caves in the Vindhyāsan tekdi at Bhāndak The inscription is incised on a pillar and records the grant of some *nivartanas* of land for the grazing of cows and of some more in favour of a temple, made by the *Dandanāyaka* Vāsudeva during the reign of the Chālukya Tribhuvanamalladeva (*i e*, Vikramāditya VI) The pillar has appropriate figures of cows and calves sculptured on it[25]

The Paramāras of Malwa —There is a large stone inscription describing the Paramāra rulers of Malwa from Vairisimha to Naravarman There is much uncertainty about the provenance of this inscription According to the records in the Museum, the stone was brought to Nagpur from Amarakantak, but there is no mention of it among the records at Amarakantak of which a list was sent by Jenkins to the Asiatic Society of Bengal in 1825 Hiralal thought that it belonged to Bilhari in the Jabalpur District[26] But there is no basis for this conjecture It seems to have been brought to Nagpur from Bhāndak in the Chanda District The inscription records that the Paramāra prince donated the village Mokhalapātaka in place of two other villages in Vyāpuramandala previously granted by his brother Lakshmadeva These places can be located in the Chāndā District Vyāpura is Wurgaon near Vairagadh, and Mokhalapātaka is Mokhara, about 50 miles east of Chanda When Cunningham visited Bhāndak, he was told that a large inscription had been removed from there to Nagpur[27] This is that inscription

Two copper-plate inscriptions of the Paramāras are also deposited in the Museum Both of them were found at the sacred *tirtha*

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[20] *Ibid*, Vol IV, pp 331 f

[21] *Woolner Commemoration Volume*, pp 169 f, *C.I I.*, Vol IV, pp 633 f

[22] *C I I*, Vol IV, pp 324 f

[23] *Ibid*, Vol IV, pp 501 f

[24] *Ibid*, Vol IV, pp 557 f

[25] Edited by Kielhorn, *Ep Ind*, Vol III, p 304

[26] Hiralal, *Inscriptions in C P and Berar*, Second Edn, p 1

[27] Cunningham, *A S R*, Vol IX, p 127

of Māndhātā in M P —one being of Devapāladeva[28] and the other of Jayavarman[29] They record grants of land to Brāhmanas

The Chandellas —A copper-plate grant of the Chandella king Trailokyavarman, dated in the Vikrama Samvat 1264 (A D 1208) was found at Tehri in the former Orchha State It records the grant, by Trailokyavarman, of the village Mandaurā (modern Madaurā in the Lalitpur Sub-division of the Jhansi District in U P)[30].

The Yādavas —There is a mutilated stone inscription of the Yādavas deposited in the Museum It was found at Lānji in the Bhandārā District It is supposed to belong to the reign of the Yādava king Rāmachandra, but has not yet been published or even deciphered[31]

The Nāgavamśis —There were kingdoms of the Nagavamsis in Chhattisgadh which continued to flourish till the fourteenth century A D Their inscriptions have been found in the former States of Kawardhā and Bastar The Museum has a stone inscription of Gangamahādevi, queen of Someśvaradeva of Chakrakotya (Bastar State), found at Barsur[32] It is dated in the Śaka year 1131 (A D 1109) and records the donation, by Gangamahādevi, of the village Kaeramaruka (probably identical with Kodmalnar near Barsur) to the two temples of Śiva built by her and named Virasomeśvara and Gangādhareśvara in the name of her husband and herself

The Muslims —Some stone inscriptions of the Muslims have been found at Batihāgadh in the Damoh District They have been removed to the Museum Nasiruddin Mahmud of the Slave Dynasty (A D 1246—1266) appointed Malik Julāchi Governor of the Chedi country The latter's son Hisamuddin placed Jallāl Khojā in charge of the country round Damoh An inscription of the latter dated in the Vikrama year 1385 (A D 1328), recording some of his victories has been found at Batihāgadh (21 miles north-west of Damoh) [33] Another inscription found at the same place is dated in the Vikrama year 1520 (A D 1463) and mentions *Mahārājādhirāja* Sultan Mahmud Shah Khilchi of Mādogadh (Māndu) and Khilachipura (Khiljipur near Rajgadh in Central India) [34] A third inscription found at Damoh dated in the Vikrama year 1570 (A D 1512) is of the reign of Sultan Mahmudshah, son of Nadir Shah, the last of the Khiljis in Malwa It is written in Hindi and proclaims remission of certain taxes levied in the town of Damoh[35]

Besides these important inscriptions, there are some minor inscriptions deposited in the Museum such as the Mamjari copper-plate inscription of Telugideva, the Jatāśankara stone inscription of Vijayasimha, etc which need not be summarised here

It will thus be seen that the Nagpur Museum contains several inscriptions which range in dates from the third century B C to the sixteenth century A D and were collected from several places formerly included in the Central Provinces and Berar They have been of immense help in understanding the ancient history of Vidarbha, Dakshina Kosala and Chedi countries

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[28] Edited by Kielhorn, *Ep Ind*, Vol IX, pp 103 f

[29] Edited by Kielhorn, *ibid*, Vol IX, pp 117 f

[30] Edited by Katare, *ibid*, Vol XXXI, pp 70 f

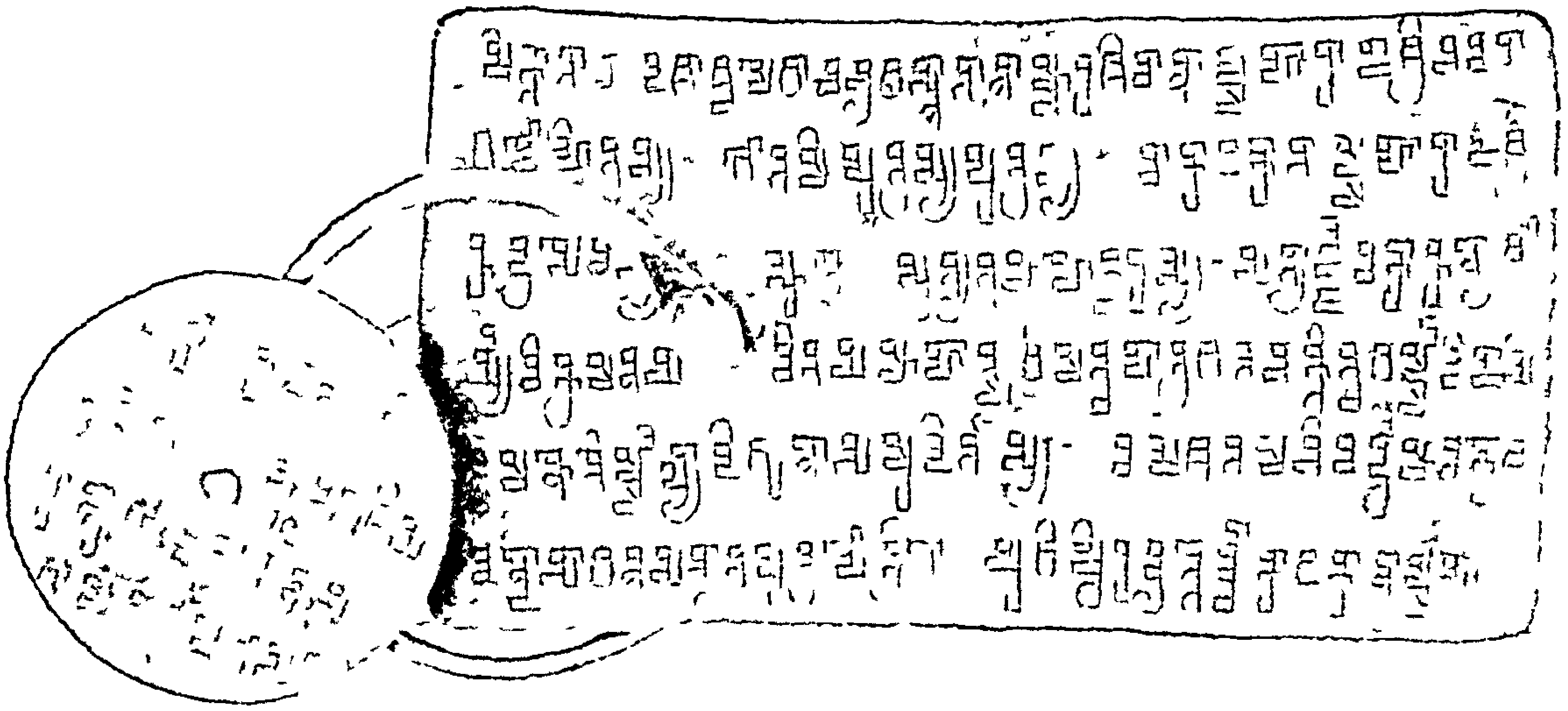
[31] Hiralal, *Inscriptions in C P and Berar*, Second Edn, p 20

[32] *Ep Ind*, Vol III, p 164

[33] Edited by Hiralal, *Epi Ind*, Vol XII, pp 44 f

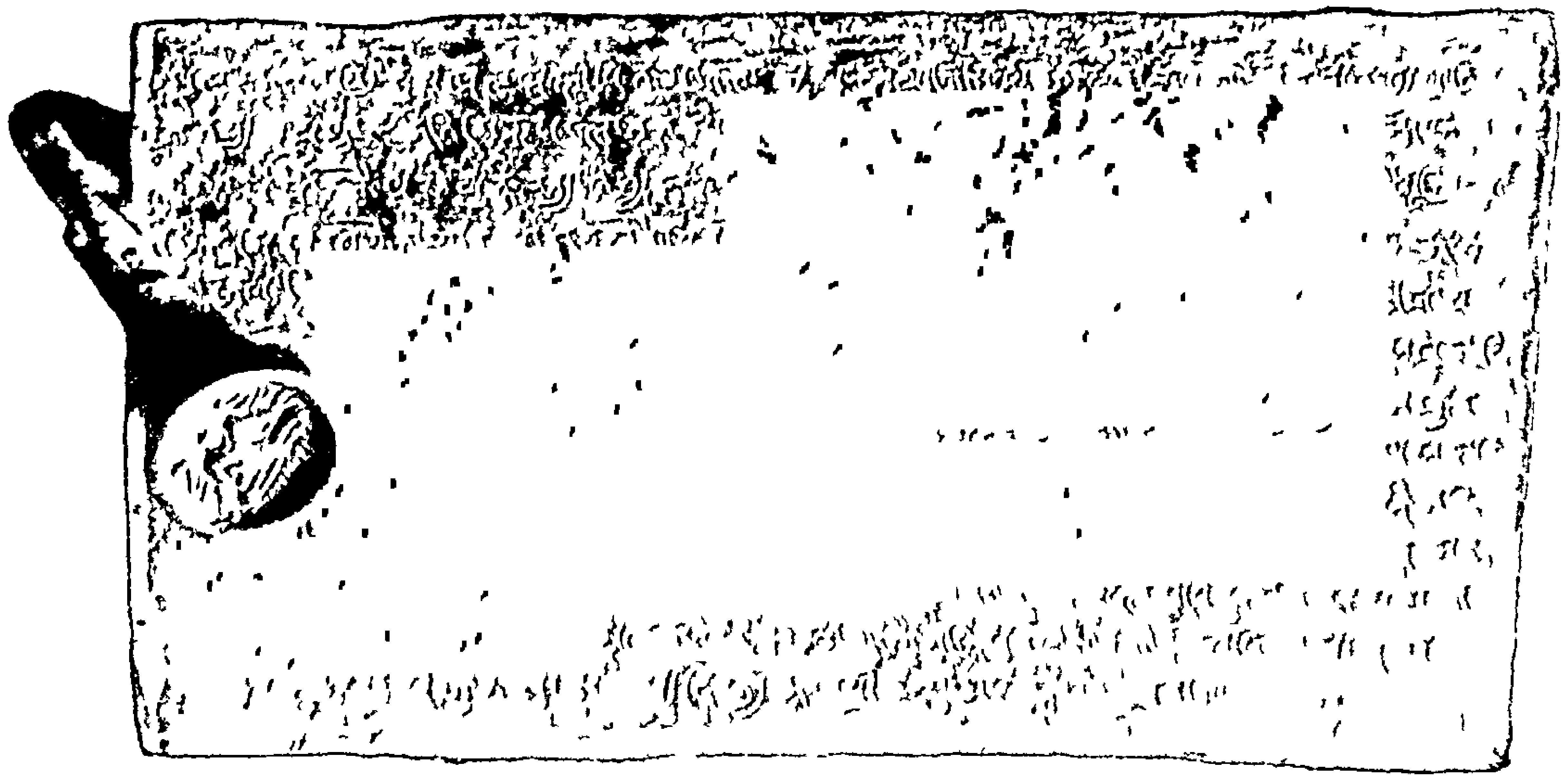
[34] Noticed by Hiralal, *Inscriptions in C P and Berar*, Second Edn, p 60

[35] Edited by Hiralal, *Ep Ind*, Vol IX, pp 291 f



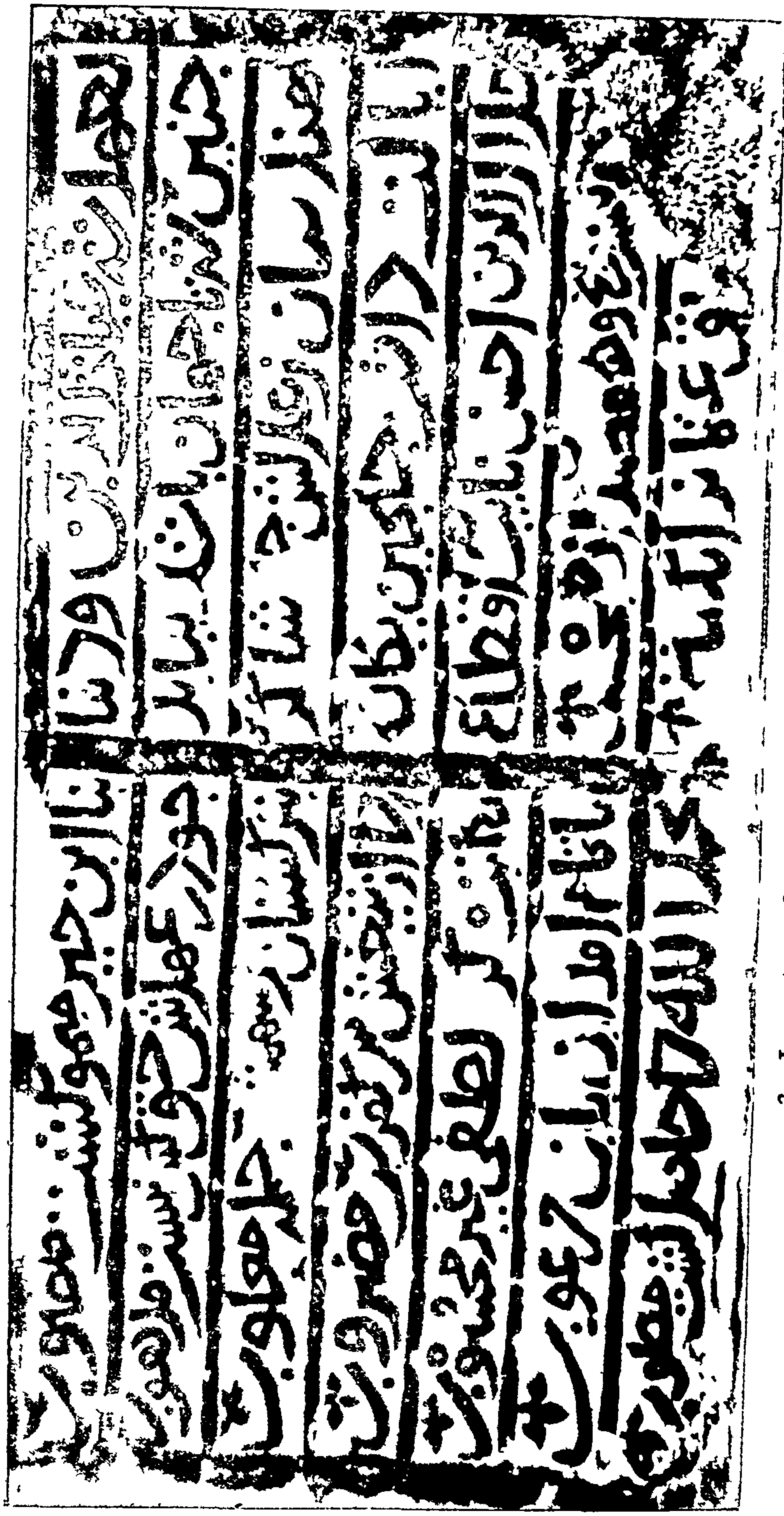
1 Seoni plate of the Vākātaka King Pravarsena II

(5th century A.D.)



2 Sisvai Plates of the Rāshtrakuta King Govind III

[Saka 729 (807 A.D.)]



3 Inscription of the time of Ghiyāthu'd Dīn u Dunyā

[A H 725 (1324 A D)]

4 Stone Inscription of Malik Mukhlisu'l-Mulk
[A H 885 (1480 AD)]

PLATE IV

5 Persian Stone Inscription, Burhanpur

Muslim Inscriptions
in the
Central Museum, Nagpur

BY

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THE Central Museum, Nagpur, possesses a fairly good collection, and if one may say so, fairly representative too, of the copper-plate and stone epigraphs which were found at different places in the former Central Provinces now forming parts of Madhya Pradesh and Maharashtra Among these are ten Persian and Arabic inscriptions, three of which are displayed in the main epigraphic gallery, three are built up in the western porch of the Museum building and the remaining four are stored in the spare-room awaiting display, evidently for want of space

The late Rai Bahadur Dr Hiralal who, with the active help of Mr M A Suboor, M A, the Coin Expert of the Museum, seems to have been mainly responsible for acquiring these inscriptions from far-off places like Batihagarh and Damoh and Burhanpur in the Damoh and West Nimar districts, respectively, of Madhya Pradesh, and Amner and Kalamb respectively in the Amravati and Yeotmal districts of Maharashtra, also noticed most of them giving their brief contents[1], and the Kalamb inscription was described at the meeting of the Indian Historical Records Commission held at Nagpur in 1928[2] Subsequently, these epigraphs were briefly catalogued, along with the Sanskrit records and copper-plate grants, in the *Descriptive Notes on the Inscriptions deposited in the Central Museum*, which was published in 1941 through the efforts of the then Curator, Dr S S Patwardhan, who was assisted in the preparation of the notes on the Persian and Arabic Inscriptions by Mr Suboor My predecessor-in-office had got their inked rubbings prepared some time before I joined in 1953 It is perhaps in the fitness of the things that these important historical documents are described here in brief, and as correctly as possible, for the information of general public and scholars alike, on the happy occasion of the centenary of this pioneer Museum of Central India

The earliest inscription of the group belongs to the first quarter of the fourteenth century The tablet on which it is engraved was originally found at Batihagarh, situated at a distance of about 32 kilometres to the north-west of the district headquarters Damoh, where

1 Hiralal, *Inscriptions in the Central Provinces and Berar* (Nagpur, 1932) An earlier edition of this work was published in 1916 under the title *Descriptive List of Inscriptions in Central Provinces and Berar*

2 *Proceedings of the Meetings of the Ind Hist Rec Com*, Vol XI (Calcutta, 1929), p 92

it lay in the Deputy Commissioner's bungalow before its removal to the Museum, here it is fixed up in the western porch. According to R B Hiralal, the slab was originally fixed on the stepped well which locally goes under the name Sās Bahu-ki-Baoli[1]. Incidentally, it may be of interest to note that three Sanskrit inscriptions from this village, of which two were carved in the reign of Muhammad bin Tughluq Shah (1325—1352) and one in the reign of Mahmud Shāh Khalji of Malwa (1436—1469), are also in the Central Museum.

The Batihagarh inscription (Pl II) consists of seven verses in Persian, the first three of which record the praises of the ruling monarch, Ghiyāthu'd-Din-u-Dunyā, by whom Ghiyāthu'd-Din Tughluq Shah, the Delhi king (1320—1325), is meant. He is stated therein to be just and equitable towards his subjects, and inspiring awe and fear in the heart of the inhabitants of Turkistan, i e, the land of the Mongols, whose invasions were a menace to northern India in the thirteenth century. The fourth and fifth lines state that the unique Juljin was the *muqti* (fief-holder) of the region and Jalālu'd-Din Ahsan was his deputy. In the last two lines, the fact that a step-well was constructed in A H 725, which began on the 18th December 1324 A D, and the name of one Uthmān, who was probably the builder, are recorded.

This epigraph, which is inscribed in *Naskh* style, characteristic of the early Tughluq records, is extremely important in more than one respect. Historians differ as to the date of the death of Ghiyāthu'd-Din Tughluq Shāh and accession of his son Muhammad bin Tughluq Shāh. While contemporary historian Barani, followed by subsequent historians like Yahyā and others, gives A H 725[2], another contemporary Isāmi quotes A H 724 as the year of Tughluq Shah's death[3]. None of them gives the month of the year. Now Hājjiu'd-Dabir, the author of the celebrated Arabic history of Gujarat quotes Husām Khan, a mid-sixteenth century writer, to say that Tughluq Shah died on the last day of A H 724, that is to say, about the 17th December 1324 A D[4]. Dr A Mahdi Husain, the greatest living authority on the history of the House of Tughluq, is inclined to accept 13th July 1325 A D[5], which is in contravention to the epigraphic evidence. It is really unfortunate that our record does not specify the month, which would have settled this controversial problem once for all. Nevertheless, it furnishes important evidence in that it fixes the downward limit of the reign of Tughluq Shah, i e, A H 725. As against this, we have the evidence of another inscription, for fixing the upward limit of his successor's reign. The Cambay inscription of Muhammad bin Tughluq Shāh bears the date 18th Muharram A H 725 (4th January 1325 A D)[6], which shows that Tughluq Shah must have died some time between the first day or so of the year, i e, 1st Muharram A H 725 (18th December 1324 A D), the date of our inscription and 18th Muharram A H 725 (4th January 1325 A D), the date of the Cambay record. This would seem to be corroborated by both Isāmi, a reliable author and by Husām Khan author of the now lost *Tabaqat-i-Bahadur Shahi* which has been quoted by Hājjiu'd-Dabir[7].

Another important aspect of the present record is that it is only with its help that it has been possible to determine the correct spelling of the name of the Tughluq governor in the region, namely, Malik Juljin. The name of this celebrated official is variously written as Zulchi, Dulaji, Dhulachi, Khuljin, Khulchain (of which correct form Kulchand was suggested),

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1 Hiralal, *op cit*, p 59. His statements about this as well as the Sanskrit records of Muhammad bin Tughluq Shāh from Batihagarh, are to be accepted with caution.

2 Barani, *Tārikh-i-Firuz Shāhi* (Calcutta, 1862), p 456, Yahyā, *Tārikh-i-Mubārak Shāhi* (Calcutta, 1931), p 106

3 Isāmi, *Futūhu s-Salātin* (Agra, 1938), p 408

4 Hājjiu'd-Dabir, *Zafaru'l-Walih bi-Muzaffar wa-Alih*, Vol III (London, 1928), p 862

5 Dr A Mahdi Husain, *Tughluq Dynasty* (Calcutta, 1963), pp 79, 594—596, *EI, APS*, 1957 and 1958, pp 30—34

6 Dr A Mahdi Husain's views on the whole question and in particular on the Cambay inscription in *EI, APS* 1957 and 1958, pp 31-32, do not seem to be convincing

7 Isami, *op cit*, Hajjiu'd-Dabir, *op cit*

etc[1] Our epigraph has clearly Juljin which is evidently the correct spelling For corroborative evidence it may be noted that this form of the Malik's name also occurs in some manuscripts of Yahyā's work[2] Then Jalalu'd-Din Ahsan, the *nāib* or deputy *muqti'* of the text is perhaps identical with the official of the same name, who some years later, or in 1335 to be exact, in the reign of Muhammad bin Tughluq, created history by his successful revolt resulting in the foundation of the sultanate of Madura in south India Our inscription would thus supply an important missing link in the career of Jalālu'd-Din Ahsan Shāh, of which very little is known Incidentally, one of the two Batihagarh inscriptions also mentions Jalāl Khojā which may also refer to the same person If so, it may mean that he was still posted in the region at least until 1328, the year in which the record under reference was set up[3] Last but not the least, the record provides very valuable historical information about the political status of this region in the Chedi country under the early Tughluq rulers

The second inscription, (Pl III) also built up into the western porch of the Museum, is of the time of Ghiyāthu'd-Din Khalji of Malwa (1469—1500) It is said to have been originally put up on the western gate of the now extinct fort at Damoh and was first noticed by General A Cunningham and subsequently by R B Hiralal[4] It also contains a seven-line text in Persian verse, the first of which, appropriately as it would appear, invokes prayers for the safety and invincibility of Damoh district The next two lines refer to the *muqti'* of the region Malik Mukhlisu'l-Mulk who is eulogised as the master of pen and sword[5] and knowledge and action In the next line, he is spoken of as the most favourite of the king Ghiyāthu'd-Din, the king of the universe, while the following two couplets register 24th Shawwāl A H 885 (27th December 1480 A D) as the date of the construction of the rampart (*fasil*) in front of the western gate of the town. The last line quotes the name of the poet Raghāni who had composed the text

This inscription thus provides useful material for the local history of Damoh The *muqti'* Mukhlisu'l-Mulk, like so many other officials of the Malwa Sultāns of high rank, does not find mention in historical works, and, therefore too, the present epigraph is valuable, since but for it, the name of this high official associated with the region around Damoh would have remained completely unknown

The next three epigraphs are displayed in the main gallery of the Museum The earliest of these belongs to the reign of Burhan Nizām Shāh II of Ahmadnagar (1591—1595), and is again quite interesting It is bilingual, being inscribed in Arabic and *Nāgari* alphabets The Persian version which was carved in relief on the upper portion of the tablet is unfortunately too badly chiselled off to admit of any reading at all It is, however, a matter of satisfaction that the five-line *Nāgari* text is quite well preserved and with its help we are in a position to know the purport of the record correctly According to it, the stone-slab was set up in A H 1000 (1591-1592 A D) in the reign of Hadrat Burhān Nizām Shāh Sultān (the Second), to indicate that the straight road led to Sālewad (Sālod) and that branching off to left went to Nāchangāon. Both Sālod and Nāchangāon are stated to be in Wardha district which borders on the Yeotmal district in which Kalamb, the original findspot of the present tablet is situated

In other words, the above inscribed slab was intended to serve the purpose of a direction-stone fixed up for the convenience of the travelling public, merchants, soldiers, etc The

1 'Iṣāmi, *op cit*, pp 401, 403, Ibn Baṭṭūṭa, *The Rihla* (Baroda, 1953), p 95, Yahyā, *op cit*, pp 146, 151, 157, 165, 174, 220, Elliot and Dowson, *History of India*, Vol IV (London, 1872), pp 22, 29, 34, 40, 71 etc

2 Yahya, *op cit*

3 *Epigraphia Indica*, Vol XII, p 45

4 A Cunningham, *Archaeological Survey of India Reports*, Vol XXI (Calcutta, 1885), pp 168-69 Hiralal, *op cit*, p 59

5 This phrase is generally applied to a minister

find of this direction-stone indicates an important fact, of which no notice had been taken, at the time of describing its contents in the works mentioned in the introductory lines It appears that in the year 1591-92, the Nizām Shāhi ruler of Ahmadnagar had issued orders for setting up such direction-stones, since, apart from our direction-stone, one more such direction-stone is to be found at a distance of two miles south of Antur in Aurangabad district of Maharashtra It was also set up in A H 1000 (1591-92 A D)[1] Equally important is another aspect of this record It indicates the extent of the Nizām Shāhi kingdom on the east-north-east side

The second of the inscriptions in the said gallery and fourth of the group, chronologically speaking, is from an old *hammām* (public bath) near the Akbari-Sarāi at Burhanpur (Pl IV) It comprises three lines of writing in florid Persian written in an extremely elegant calligraphical style It is a pity that the slab is damaged, and the letters thereon have lost their prominence of relief Nevertheless, one can even now appreciate the masterful style of its writing, that the gifted calligraphist, Khalf a't-Tabrizi, has been capable of Khalf seems to have been a professional calligrapher He had also designed the inscription appearing on the abovementioned Akbari-Sarāi, which also, it may be pointed out, was built under the superintendence of Lashkar Khān eleven years later, during the governorship of Khān-i-Khānān [2]

The above *hammām* at Burhanpur was constructed, according to our epigraph, by the order of Nawwāb Mirzā 'Abdu'r-Rahim Khān, Khān-i-Khānān, *sipahasālār*, in A H 1016 (1607-08 A D) during the reign of the *Mughal* emperor Nuru'd-Din Muhammad Jahāngir The person who actually saw through the completion of the work was Muhammad 'Ali-Kark. It may be worth while to point out that this *hammām* has been described by a contemporary writer Mulla 'Abdu'l-Bāqi Nahawandi, the author of three big-sized volumes dealing with the life and achievements in varied fields of Nawwāb Khān-i-Khānān[3] Another point worth noticing is that in the text the title *'adil*, i e , just is used for emperor Jahangir, whose love of justice is well-known through the fact of his installation of a chain of justice

The third tablet in the epigraphical gallery containing the fifth epigraph of the lot is reported to have been brought from Amner in the Amravati district This brief but historically important record, consisting of one Persian couplet arranged in two lines, states that Ismā'il Khān constructed some structure in the month of Ramadān of the year A H 1055 (October-November 1645 A D) This Ismāil Khān has been identified with one of the five sons of Muhammad Khān Nayāzi[4] of Ashti, in the Wardha district, who had been granted the *pargana* of Amner, then consisting of parts of the Morsi *taluk* in the Amravati district and Katol *tāluk* in the Nagpur district, by his father[5] He is probably identical with Nawwāb Ismā'il Khān of the time of Aurangzeb, who was appointed *faujdār* of Jālnāpur in 1659-60, and was already *qal' adāi* of the fort of Ahmadnagar in 1663 A D , when, we are told by the court historian, his rank was increased[6]

The nature of the monument constructed by Ismā'il Khān is not mentioned in this record, but according to the report of the members of the Nayāzi family living in Ashti in the Wardha district, who claim direct descent from the well-known Nāyazi chieftain, he had also built a mosque at Amner, the inscription on which, when of course the mosque had crumbled

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[1] *Epigraphia Indo-Moslemica (EIM)*, 1919-20, pp 14-15, pl IXa, where it is not indicated if the pillar on which the directions are marked, also contains these in *Nāgari* characters as well

[2] *EI APS*, 1962, p 75, pl XXIVb For one more calligraphical specimen of this calligrapher on stone, found at Paithan in the Aurangabad district of Maharashtra, see *EIM*, 1949-50, p 13, pl VIIb, where his sobrique It a't-Tabrizi is doubtfully read as a' n-nadhir

[3] 'Abdu'l-Bāqi, *Ma'āthir-i-Rahimi*, Vol II (Calcutta, 1925), pp 600-601

[4] The Niyāzis are a famous clan of the Afghāns

[5] Suboor, *A short Note on the Ashti and Burhanpur Inscriptions*, Bulletin of the Nagpur Museum, No 1 (Allahabad, 1920), p 5

[6] Muhammad Kāzim, *'Ālamgir Nāma* (Calcutta, 1865—1873), pp 454, 755

down, was shifted to the Central Museum[1] If so, the present tablet may have been originally fixed on that mosque

The sixth inscription exhibited in the Museum is fragmentary and of unhistorical purport It is carved in bold *Naskh* script of the early period on a slab which is fixed into the right side of the western porch It merely contains part of verse 14 from the Chapter XXXVI containing the famous *sura-i-Yāsin* of the *Qur'ān* As its text is not published anywhere, it may be quoted here to make the record as complete as possible ' ' *fakadhdhabuhuma fa' azzaznā bithālithin faqā* [*lu*] The translation of the whole verse also indicating the missing portions in the brackets, is '['When we sent to them two,] they rejected both of them, then we strengthened them with a third, so they [said Surely we are messengers to you]'[2] But it should be noted that this inscription, on palaeographical grounds, cannot belong to a period later than the first half of the fourteenth century, if not earlier.

It has been pointed out in the beginning of this brief resumé that, apart from the abovementioned six records, there are four inscribed tombstones in the Museum, which are lying in the spare-room These originally belonged to three sarcophaga, which are said to have been recovered from the Sitabuldi locality of the Nagpur City itself Two of these, which are only the head-side or foot-side portions of the tombs, are inscribed with short texts in *Nasta'liq* style of writing, which is quite crude and inartistic They register the date of the death of two persons, but the respective part of the two sarcophaga bearing the names seem to be missing The year is illegible in both the cases, but it is almost certain that they do not belong to a period earlier than the middle of the eighteenth century or so

The third sarcophagus is more or less complete and contains an epitaph which is the concluding epigraph of this brief narrative. It is engraved in *Nasta'liq* script and records that Taj Muhammad *mi'mār* expired on the 27th Rabi' II A H. 1201 (16th February 1781 A D)[3] The deceased, it may be pointed out, is referred to in the epitaph as *mi'mār* meaning 'mason' thus indicating that he belonged to that professional class.

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[1] Suboor, *op cit*

[2] The two messengers are Moses and Jesus and the third is Prophet Muhammad

[3] Apparently, the year A.H 1201, stated in the text to be the year of the construction of the sarcophagus is also that of his death

On Exhibition of Coins in a Museum

P J CHINMULGUND, I C S

THE orthodox method of keeping coins in a Museum is to arrange them in trays, chronologically, according to dynasty, rulers and their issues These trays are kept in a safe or a strong room Only a few specimens out of this collection are actually exhibited in the museum show-cases In fact, in a majority of cases, the coins themselves are not exhibited at all, but plaster casts of coins are taken and exhibited The main collection is only made available for inspection and study to students and scholars interested in Numismatics It is often argued that there is a certain risk involved in exhibiting valuable coins themselves in the show-cases The net result of this procedure is that very few coins or their casts are exhibited and the general public visiting the Museum gets no idea at all either of the collection in the Museum or of the importance of coins as sources of History and Culture or of the importance of the Science of Numismatics

2 It is desirable that this system should change if the general public are to take an interest in Numismatics and in this article I propose to make a few suggestions as to how this should be brought about

3 The argument that exhibition of valuable coins entails certain risks is not really valid It is well-known that many of the other exhibits like bronzes, small articles of jewellery, seals and so on, which are exhibited in museums are equally valuable Apparently, no risk is apprehended in exhibiting these Hence there is no reason why any special risk should attach to the exhibition of coins If certain ordinary precautions, which every curator has to take in exhibiting valuable articles, are taken, there is no reason why coins cannot be exhibited in absolute safety Exhibition of an original has a much greater effect on the visitor to a Museum than that of a plaster cast thereof I would, therefore, suggest that, except perhaps in a few rare cases, original coins themselves should be exhibited

4 The present system of exhibiting stray specimens or their casts is also an antiquated one and needs to be changed By seeing such stray exhibits, visitors get no idea either of the historic importance and value of a coin or of its artistic merit Though, therefore, the storage of the entire collection in trays in a safe or a strong room may be continued, periodic exhibitions of coins in the Museum should be held, emphasizing various aspects of Numismatics Thus at one time coins of a dynasty may be exhibited by selecting the specimens of the coinage of each ruler, which are of historic importance For example, coins of rulers of a particular dynasty like the Mitra and Sena dynasties of Pānchāla and Ayodhyā who are otherwise completely unknown, can be shown and as a background to the coins, cards may be put up explaining why these particular coins are of historic importance

5 Another exhibition may be arranged with a view to bringing out the value of coins as a source of cultural hostory As is well-known, the series of Gupta gold coins is not only important as a source of history, but its value as depicting the costume, weapons, furniture and jewellery of the period is equally great Thus,

the coins of Samudragupta may be shown, which show the King wearing the Kushāna type of dress and, side by side may be shown the Lyrist type that depicts him in typical Indian costume The different varieties of the horseman type coins of Kumārgupta each of which shows the King as well as the horse decked in different types of jewellery and accoutrements could also form a very interesting exhibit At the same time, the reverses of Gupta coins which depict Goddess Laxmi in various attitudes wearing diverse kinds of jewellery and sitting on a throne, or on a lion, or standing on a Makara and so on could also be displayed Such exhibitions should be advertised as the "importance of coins as a source of Cultural History"

6 Then again a different exhibition may be arranged with a view to illustrating religious history as revealed by coins Here the different series of punch-marked coins showing different symbols, the Ujjain coins showing Karttikeya and the Panchāla series of Mitra coins depicting various deities like Agni, Vishnu, the star Falguni and so on, the cast copper coins showing the Tri-Ratnas motif, and so on would form an interesting exhibition Here also in the background, cards explaining the religious significance of these representations should be displayed

7 Yet another exhibition could be arranged on the basis of the technique of manufacturing coins Here could be shown the double cast coins with the hill and elephant motifs, and the Yaudheya cast coins of the elephant type As a contrast some good die-struck coins should be placed by their side These would, to mention a few instances, include the double die coins of Taxila, the Kuninda coins, the Western Ksatrapa coins with their very well executed inscriptions and others The idea here is to bring out the contrast between the two methods of fabrication of a coin and to show how a die-struck coin is far superior to a cast-coin in execution and appearance

8 Still another method would be to display coins which are outstanding because of their purely artistic merit Some of the archer type coins of the Guptas, the Lion Slayer and Tiger Slayer coins of Chandragupta II and Samudragupta, the Rhinoceros Slayer and Elephant rider type coins of Kumargupta the First, the Agra Mohors of Jahangir of the 5th and 6th year of his reign, the Ajmer rupees of the same ruler, the mintless and Agra Ilahi issues of Akbar, the Zodiac series of Jahangir (both in silver and gold), the portrait medals of Akbar and Jahangir and others would form a very interesting exhibition It would show clearly excellance and trend of art during different periods of Indian History

9 Yet again, another display could be arranged which shows the conservatism of Indian coin types Here, could be included the Laxmi type coins of Gāngeyadeva, by the side of which could be shown the same type of coins of Mohamed Ghori Similarly, the bull and the horseman coins of the Hindu rulers of Kabul should be placed side by side with the same type of coins of Delhi Sultans, the coins of the late Moghul rulers like Shah Alam and Alamgir accompanied by the issues of East India Company,* which are in close imitation of those Moghul issues should be included The writing in the background would explain the reason for such conservatism, *viz*, that where the people were accustomed to a particular type they would be hesitant in accepting an unknown type, further, to show that a new ruler has ascended the throne, the ruler's name is included on the coins, but without in any way affecting the coin type

10 In all these cases apart from the write-up in the background, enlarged photographs of coins should be shown This will facilitate the observers' understanding the main point of the exhibition, since the coins themselves are rather too small to be studied from a distance Well-trained guide lecturers should be available to explain the exhibits to the visitors and answer their queries

11 If these suggestions are accepted, it will have a two-fold advantage Firstly, it will enable the visitors to a Museum to understand the importance of coins in the fields of Political History, Social History, Religious

History, History of Art, Economics and Politics The second advantage would be that it will do away, in many cases, with the disposal of duplicate coins in a Museum, since such exhibitions could be kept as permanent sets and stored away when the exhibition is over, to be again displayed after a year or two I hope, the Directors and Curators of Museums in our country would give a thought to these suggestions and adopt them so that Numismatics which today is looked upon purely as a pursuit of the learned and the scholar, will have a wider appeal and catch the imagination of the average visitor to the Museum Stimulation of such interest in the average visitor will lead to a few of them taking seriously to the study of the coins so that the present dearth of workers in this field will in course of time disappear

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Origin of the Buddha Image

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THE question of the origin of the Buddha image is a significant one from the standpoint of religious and art history The emergence of the Buddha image was the outcome of a long-drawn preceding movement of devotional theism or *Bhakti* The Buddha image was not an isolated event which happened all of a sudden without its predisposing causes Opinions have differed as to the place of origin of the Buddha image whether in the Gandhāra school or in the Mathurā school of sculpture This question must be examined independently against the background of religious history and secondly, with reference to the various elements of Buddhist iconography as they can be explained in the context of India's religious and art symbolism

Let us take the religious background first There can be no images unless there is a definite religious movement advocating the worship of the image The evidence from inscriptions and sculptures found at Mathurā and in the adjoining centres is abundant on this point In the first century B C we have inscriptional evidence of the *Bhakti*-cult of Vāsudeva amongst the Bhāgvatas prevalent in Mathurā which inspired the followers of Buddhism On a lintel fragment of the reign of Mahākshatrapa Śodāsa there is a mention of the Mahāsthāna of the gods Samkarshana and Vāsudeva In the other inscription found at Morā and also belonging to the reign of Śodāsa (1st century B C) there is clear reference to a shrine dedicated to the Five Heroes of the Vrishnis (*Vrishnīnām pañcha virānām*) According to the Vāyu Purāna, Vrishni heroes were Balarāma, Krishna, Pradyumna, Aniruddha and Sāmba In the Nārāyana Vātaka inscription found at the ancient site of *Majhamikā* (*Mādhyamikā*, modern Nagri near Chittor) reference is made to god Samkarshana and Vāsudeva who were given the title of Bhagvān and also spoken of as *Sarveśvara*, i e , pre-eminent among all deities In the Besnagar inscription of Heliodorus there is reference to the Bhāgavata *Bhakti*-cult and for the worship of Bhagavān Vāsudeva, a shrine was also discovered during the excavation This evidence proves beyond doubt that Mathurā was the nucleus of a circle of the Bhāgavata movement whose radius covered an area of about 200 miles, towards the south-west and south-east In the region of Mathurā itself several images of Balarāma have been found pointing to a cult of *Bhakti* to Balarāma as a deity Special mention should be made of an image of Balarāma round at the village of Junsuti about six miles from Mathurā which on stylistic ground should be assigned to about the late second century B C We may also point to the representation of the various Brāhmanical deities like Indra, Agni, Vishnu, Śiva, Bhumi (the earth goddess) and even stars like Phālguni on the Pañchāla coins of Ahichchhatrā

All this evidence indicates that the emergence of the Buddha image was the outcome of a movement amongst the Buddhists for worshipping the Master in a human form in response to the same religious impulse as characterised the followers of the Bhāgavata cult When the Vaishnavas developed a psychological background and a religious emotion suitable for image worship the Buddhist could not long remain unaffected They felt the need of a visual human symbol to whom they could pay homage and religious worship This culminated in the representation of the Buddha in an anthropomorphic form.

Even in Buddhism the urge to render devotional worship to Buddha had existed long before the actual making of image but then he was represented by means of symbols For example, instead of making the human image the artists depicted him in the form of some well-known symbols like the *Bodhi-vriksha*, *Dharma-chakra*, *Stupa*, *Tri atna*, *Chudā* (head-dress), *Bhikshā-Pātra* (Alms-bowl), etc Religious authority was clear in this matter, viz, that devotional worship, in the manner of the *Bhakti*-cult, could be offered to the Buddha depicted in a symbolical form but there was no sanction to make the image Some great decision was required to get over this interdiction The formulation and execution of image were significant problems which could only be disposed of at a very high level It was not a question to be summarily settled as the ingenuity of some local artists working either in Mathurā or in Gāndhāra as some scholars have suggested We may clarify the position in greater relief with reference to what happens within the orbit of those religious denominations that are opposed to image-worship, e g, Islam or Ārya-Samāja These religious orders are definitely opposed to the making and worship of images and none of their followers will touch it with a pair of tongs nor is it possible to find a single image in any of their religious places A similar situation must be envisaged in the early history of Buddhism

Of the hundreds and thousands of Buddha images found at Mathurā, in Gāndhāra and in other places not one antedates the reign of Kanishka Confused suggestions have been made as to the existence of a Buddha-like figure on the coins of Wema Kadaphises, or Azes, or Maues But none of them stands critical scrutiny and none of them has the value of a proved hypotheses We have, therefore, ultimately to fall back upon the firm position that the *earliest Buddha images are those that bear dates in the reign of Kanishka*

When we examine the archaeological evidence we find that most important dated image is one found at Sarnath, viz, the colossal standing Bodhisattva dated in the third year of Kanishka and dedicated by Bhikshu Bala of Mathurā After the discovery of this particular image another one, dated in the second year of Kanishka, and made of the same kind of red sand-stone, was found at Kauśāmbi Subsequent to these two colossi may be arranged a large number of dated images in several other years of the reign of Kanishka and his successors, viz, Vāsishka, Huvishka and Vāsudeva

When we look to the productions of the Gāndhāra school we find a different story. We have no evidence upto now of the spread of any *Bhakti*-cult in the area roundabout Taxila and Peshawar About the images of this school Sir John Marshall has observed, " Not one of the thousands of known images bears a date in any known era " Wheeler also writes, " It is a point on which most authorities agreed that the palmy days of Buddhism and Buddhist art coincide with the reign of the great Kushāna kings and more specially with that of Kanishka "

As against this religious prohibition against the making of the Buddha image, it may be imagined that the Buddhists coming under the influence of the Bhāgvata movement of image-worship and temple-building had been wishing for some time past to depict the Buddha in human form The force of the traditional prohibition was very strong and no one would dare easily transgress it Therefore, in the earliest stages to begin with a decision on the part of the highest patron of the faith was required in the matter Archaeological evidence points to the fact that such a forward step was taken by Kanishka, secondly, in the beginning it was not the image of the Buddha but that of Bodhisattva with which they started, and in which it was considered that no violence to the tradition or scriptures was involved

The natural inference is that upto the time of Kanishka's coming to the throne, the tradition of not representing Buddha in human form was strictly observed in Gāndhāra also To break this convention there was need for a supreme decision at the highest level Public opinion must have been raged for some time past itself on the side of those who wanted to see the Buddha depicted in human form.

In the context of the Mahāyāna thought such an urge on the part of the people must have been a very natural one and can be understood easily The arrival of Kanishka on the scene with his far-flung authority and particular religious attitude was a significant event in the history of not only Buddhism but also Zoroastrianism He was responsible for the supreme decision in regard to the representation of a vast and varied pantheon on his coins In the reign of his predecessor Wema Kadaphises only the figure of Śiva with his Nandi was depicted on the imperial coinage Kanishka decided that the figures of the Zoroastrian deities (Yazda whose number is 27) should be represented on his coins It seems to be a natural corollary to this decision, that Kanishka should have thought of including the Greek, the Brāhmanical and Buddhist pantheons also in his scheme of religion So far as Brāhmanism was concerned he continued to include the figure of Śiva on his coins under the name of Oesho As regards Buddhism it quite fits into this context that Buddha was selected as the most suitable representative figure in Buddhism to be adopted on the coins There was of course the age-old interdiction against the depicting of the Buddha in human form Very naturally such a position could not be maintained any longer in the face of the emperor's decision to broaden the scope of the religious motifs to be adopted on the coins which was an exclusive royal prerogative None can argue that the decision to depict the Iranian deities came from any other authority except that of the emperor and the same should be conceded as an undoubted fact for the Image of *BODDO* on Kanishka coins The convention regarding the representation of the Buddha through symbols was then relegated to the background Thus the way was thrown open for the representation of the Buddha in human form Why the Buddha figure was not carved before the time of Kanishka should not be attributed to any want of capacity on the part of the sculptors As the available statuary shows the Mathurā artists were quite competent to fashion the statues of gods and men in any shape or form Something else was restraining them so far as the Buddha image was concerned The urge of the people to see Buddha in a concrete form could no longer be satisfied with the mere sight of symbols but demanded to visualise the Master in all his resplendance as the *Mahāpurusha* whose body was radiant with 32 marks (*dvātrimśat mahāpurusha lakshanāni*) Such seems to be the whole position with regard to the origin of Buddha image This explains the emergence of the image in its full context of religious, social, political and art conditions, all of which became integrated in the new creation of the Buddha image It cannot be accepted for a moment that the creation of the Buddha image would be the result of the vague caprice of an unknown artist of the Gāndhāra school as stated by Tarn It may be specially observed that none of the three factors in relation to the Buddha image existed in Gāndhāra, e g , there was no background of any *Bhakti* movement there as has been shown above for Mathurā, secondly, no representation of the Buddha on any coin or sculpture has been proved prior to Kanishka in the Gāndhāra school, and thirdly, none of those elements which contributed to the making of the Buddha image by combining *Chakravarti* and *Yogi* ideals had any meaning or background in the Hellenistic tradition in Gāndhāra To become acceptable to the people for whom such images were meant, the Buddha statue could only be the fruit of a purposeful design intended to satisfy the needs of a religious aspiration of the people in the form of the *Bhakti* discipline which was now an established fact at Mathurā The Brāhmanical sculptures and the images of the Jaina Tīrthankaras and, of course, also the figures of Greek and Iranian gods and goddesses on the coins were there but none of them could offer an ideal form for the representation of the Buddha If we analyse the various elements of Buddha's iconography we have to fall back not on one single image type but generally on the whole statuary that had been evolved during the course of centuries up to about the first century A D By tracing the complete formula of the Buddha image to its various sources alone, one can furnish an adequate answer to the much debated problem of the origin of the Buddha image

A 2313—6 A.

Buddha image may be divided into two principal types, viz., standing and seated. These types are distinctly different in artistic conception from each other. Whatever be the source of these two main types from the point of view of art, when we take into account the elements of the Buddhist iconography, the formula was basically conceived as combining the ideal of a Chakravartī and the ideal of a Yogi, Buddha as a Mahāpurusha was endowed with the thirty-two marks of the great man. These lent themselves easily to the iconographic conception of the Buddha figure, for example, the bump of wisdom on the top of the head called *Ushnisha*, spiral hair between the two eye-brows called *Ūrnā*, elongated ear-lobes (*Pralamba-karna pāśa*), long arms up to the knees (*Ājānubāhu*), broad chest (*Viśālavaksha*), palms of the hands and soles of the feet marked with the *Dharma-Chakra* (*Chakkrānka-hasta-pādau*), webbed fingers of the hands (*Jālanguli-kara*), etc., all these features are present in the human images of the Buddha and are directly based on Indian tradition of an Ideal Great Man. Then there are certain features contributed by the Yogi ideal of the Buddha figure, e.g., the gaze fixed on the tip of the nose resulting in the half-closed eyes (*nāsāgra-drishṭi*), cross legged posture (*padmāsana*) with hands either placed in the lap (*dhyānamudrā*) or the right-hand raised to shoulder (*abhayamudrā*), etc. The conception of a *Chakravarti* also was responsible for some of the elements in the making of the Buddhist iconography, e.g., the two chawrie-bearer attendants who were invariably associated with royalty. The *chhatra* also was an indispensable symbol for royalty as seen in the Sarnath Image of Bhikshu Bala and in the case of the Maholi Bodhisattva. They accepted halo round the head as the suitable sign of the glory of the Buddha. The conception of the halo was borrowed from Zoroastrian deities on coins round whose head it is depicted as the divine glory *hvari* (Skt. *Svar-mandala*) of Ahur Mazda. The Kushāna artists who were also called upon to represent the figure of the Iranian Yajatras (deities) on the coins of Kanishka, obviously drew upon the original figure of Ahur Mazda for the halo. The idea fitted very well with Indian conception of the divine figures being surrounded by a radiant orb (*Prabhāmandala*), although no earlier representation of this feature can be traced at Sāñchi or Bharhut. Gradually the halo became Indianised. Its Iranian origin was forgotten and during the Gupta period it was believed that the halo represented the shadow of the *Chattra* held on the head of the king. Kālidāsa mentions this conception in case of Raghu and Pārvati. It suited very well the form of the halo in the Gupta period which was now decorated as the blooming lotus with open petals and therefore known as *Padmātapatra prabhā-mandala* (halo of the form of lotus parasol).

The genesis of the Buddha image should be traced to the religious history of Buddhism. The followers of the Sarvāstivādin sect were in the ascendency at Mathurā and also in Gāndhāra. They were realists who believed in the value of the wordly ideas in the service of humanity and selfless action for the relief of human suffering and sorrow. It means that they placed higher value on the ideal of the Bodhisattvahood so much so that they declared that lord Avalokitesvara would condescend to go to the Avichi hell if he could make man happy by his presence there. This was a very powerful point of view which stirred deeply the feelings and emotions of all who listened to the new ideal. It appears that the Buddhists were divided into two camps, the traditionalists or Theravādins who were adherents of the *Nirvāna* ideal, e.g., attaining *Nirvāna* by following the ascetic way, there were others the Sarvāstivādins who did not withdraw from the *Exacting* struggle of the world but took utmost joy in sacrificing themselves for the happiness of all beings. This was in essence the ideal of the Bodhisattvahood in the palmy days of Mahāyāna Buddhism. The Bodhisattva ideal proved as of supreme attraction and it provided a new inspiration of positive service and devotion and endowed with social virtues and conscience. The effect of this bifurcated attitude was best seen in the case of the Buddha image. The followers of the Buddha ideal continued

A 2313—6 B

with their old restrictions on the image of Buddha and most probably they confined themselves to the continuation of the symbolical representation of the Master as was known in the art of Sāñchi and Bharhut On the other hand, the Sarvāstivādin monks getting more dynamic and powerful spread their activities from Taxila to Mathurā and declaring fearlessly their faith in the tangible worship of the Buddha in a human form To them the image was as real an element of religious worship as faith in the doctrines We, therefore, find that the earliest images were those not of the Buddha but of Bodhisattva which agreed with the Sarvāstivādin ideal

The word *Bodhisattva literally* means one who is destined to or worthy of attaining the *Bodhi* or enlightenment, i e, being on the path of *Sambodhi* The Buddha himself was a Bodhisattva upto the age of thirty-five years, i e, before his enlightenment at Bodhagayā After the great enlightenment he became entitled to the epithet *Buddha*, i e, 'the Enlightened One' The first part of his life of thirty-five years is also divided into two portions, viz, his palace life as a prince up to the age of twenty-nine when he was dressing himself in the robes and ornaments worthy of royalty, later when he became a recluse at the age of twenty-nine he gave up his costly dress and jewels and donned the *tri-chivara* The question which must have presented before the monk and the artists alike was whether the Buddha should be represented with or without royal dress Here the evidence of the earliest sculptures is of value to us The several early sculptures in the Mathurā school throw significant light on this point Whether they are standing images of muscular built and big size as the Sarnath Bodhisattva [Fig 7 Plate V], of the year 3 of Kanishka or the Maholi Bodhisattva, or slender seated type like the Katra Bodhisattva [Fig 6 Plate V] and Anyor Bodhisattva (both of which are undated but by the concensus of opinion of all scholars are among the earliest images made in Mathurā school), we find that it is the later phase of Gautama as Bodhisattva wearing monk's dress that was accepted for representation It may be imagined that after some time the urge to represent the Buddha in human form also must have become irresistible then it was found necessary to reorient the two types of images, the one without ornament was chosen for that of the Buddha and the other with ornaments and royal dress became the type of the Bodhisattva image When the artists were called upon to evolve a formula of the Buddha image they were not without a precedent in the examples of divine images

First in importance come the Yaksha images of the colossal standing type like that of Parkham The Parkham Yaksha is rightly spoken of as the grand ancestor of all early Indian statuary The standing Bodhisattva type was *directly indebted to it Both are* free standing and carved in the round, both of a colossal size, both have a muscular built, both impressive by their sheer volume, in both the divine character of the image is sought to be conveyed by means of its size and dominant physical force Both have their right hand held in *abhaya-mudrā* In both the drapery is of simple character, consisting of a dhoti, a girdle and an upper covering (*uttarīya*) passing on the left shoulder (*ekāmsika*) As Coomaraswamy has shown in his famous esssay on 'The origin of the Buddha image' the colossal standing Bodhisattvas in the Mathurā school were undoubtedly derived from the Parkham Yaksha type Stylistically there is the closest resemblance between the Parkham Yaksha and the Sarnath Bodhisattva which are parts of the same art cycle

It has been sometimes pointed out that the Buddha figure is represented on the coins of Maues, Azes or Wema Kadaphises, but none of these is free from doubt The very poses of their hands indicate that they were hardly intended to represent the figure of the Buddha For example, on the coins of Azes the figure has its right hand stretched horizontally outwards which is against any possible *mudrā* of the hands of the Buddha image In the lap of the figure also there is a staff placed parallel to folded legs and projecting outwards which has no meaning in the case of a Buddha figure In the case of the coins of Maues there is a similar object and the posture of the legs can hardly be said to be a true *padmāsana*

The figure on the coins of Kadaphises is very distinct and it holds in the uplifted right hand a full-blown lotus with a long stalk, a feature not found in any of the early Buddha images and can in no way be said to be of the Buddha Moreover none of these three figures seems to have had a halo round the head which was an invariable feature of all Buddha images as we see on the coins of Kanishka

We should also, while considering the formula of Buddha images, have a look back into Maurya-Śunga art in quest of the various elements constituting the image in order to find out whether any of them was recognised as such in the early Buddhist art prior to Kushāna period While the standing Bodhisattva was modelled after the standing Yakshas the seated type of the earliest Bodhisattvas like Katrā and Anyor requires to be traced Our attention is directed to the Aśokan Lion-capital of the Sarnath pillar We find here a Dharmachakra as the topmost symbol surmounting the heads of the four lions In this case it is possible to recognize the presence of Buddha in the form of Dharmachakra, the four Lions representing the Lion-seat or *Simhāsana* The Lion-seat stands for the Chakravartī aspect of his dominant personality The symbolism of the Lion-capital clearly stands for the combination of the Yogi and the Chakravartī deals which inspired the religionists and artists in formulating the personality of the Buddha If we compare the Lion-capital and the Katrā Bodhisattva image we find them to be the products of a single formula with only a slight modification The Dharmachakra is replaced by the actual human figure of the Buddha holding his hand in *abhaya mudrā* and the four lions carved in the round are replaced by the royal throne supported on the heads of two or three lion figures carved in relief The search for the formula for the Buddha image appears to have been a very intensive one and the religious teachers as well as the artists must have gone all out with their resources both in the matter of traditional motifs and representations as well as religious traditions and belief in order to perfect an iconographic form which would be acceptable to all The type of image that we find in the shape of the Katrā Bodhisattva at Mathurā does represent a synthesis and linking of several strands that were available in the eclectic religious atmosphere of Mathurā

An analysis of the Katrā Bodhisattva acquaints us with the following features —

(i) Buddha seated on Lion-throne under a Bodhi tree which gives a realistic touch to the representation of the Master as he would have been in actual life

(ii) Seated in padmāsana, with two legs crossed, which was a typical yogic posture, known from the earliest times in Indian art and religion

(iii) The right hand is held in *abhaya-mudrā* and the left placed on the left leg. This is an adaptation of the pose of hands, already seen in Yaksha images The *abhaya-mudrā* is also entirely an Indian conception

(iv) The hands and feet are marked with Dharmachakra and Triratna symbols They form part of the conception of an ideal superman

(v) On the top of the head, *Ushnisha* or raised spiral locks of hair (*Kaparda*), which are believed to have been left on the Buddha's head when he cut off his hair The hair on the head does not show any curve, as is the case in *all* images of Gandhāra school This type of hair being that of a monk with a shaven head There is an Ūrnā between the eye-brows represented by a circular small whorl of hair

(vi) There is behind the head a plain undecorated halo with a scalloped margin

(vii) The drapery consists of a cloth fastened by a girdle, as in the case of early Yaksha figures The bust is covered with a *Samghāti* which leaves the right shoulder bare Only a few folds are shown on the left arm and the shoulder

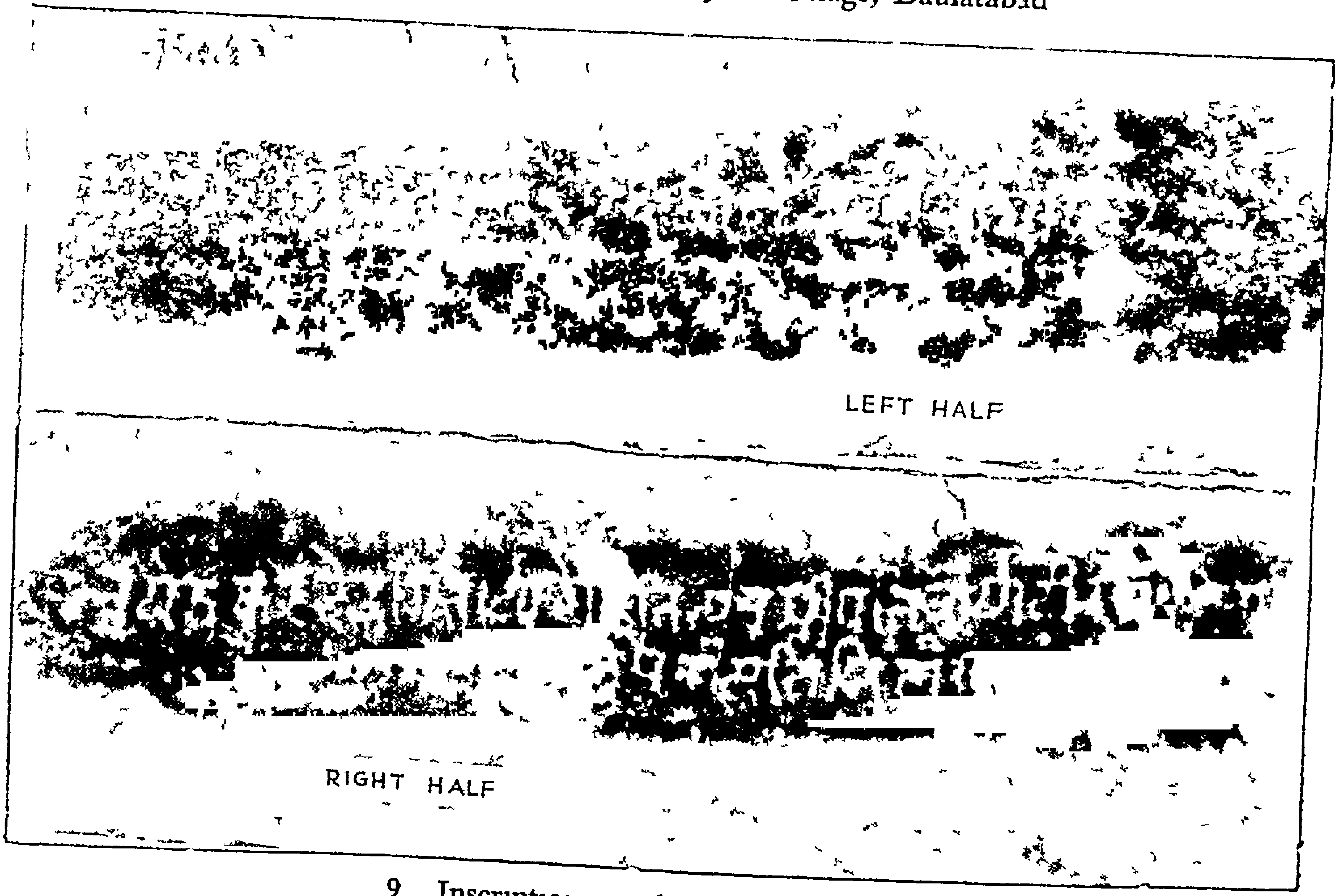
(viii) Buddha is attended by a chowri-bearer on either side These chowri-bearers are dressed like house-holders They can't yet be dentified as Indra and Brahmā or Avalokiteśvara and Maitreya

PLATE V

6 Katra Buddha

7 Sarnath Bodhisattva

8 Pedestal of mutilated Jaina image, Daulatabad



9 Inscription on the above Pedestal

(ix) In the upper two corners are shown flying Devas, throwing flowers on Buddha

Each one of the above features, with the only exception of the halo, is derived from Indian religious conceptions, associated with a Yogī or Chakravartī in general and Buddha in particular

In the early iconography, in the case of the standing figures a chhattra or parasol is shown over the Buddha's head, which also was included in the paraphernalia of the Chakravartī This feature of the two chowris and the chhattra was already the sign of royalty in early art as seen at Bharhut and in the figure of Māndhātā at Bhājā The formula of Budha's image seems to have been evolved by combination of the ideal Yogī seated in meditation and the ideal Chakravartī seated on a *simhāsana* with two chowri-bearer attendants and with a chhattra held above In the case of the seated figures, the chhattra seems to have been replaced by the halo

The third feature, borrowed from the Chakravartī iconography, was the idea of the lion-seat on which the cross-legged Yogī was depicted as having his seat The presence of the Bodhimanda or raised platform on which the Buddha was seated at Bodhagayā at the time of his enlightenment was accepted without question It was easily transformed into a raised *simhāsana* From the outset the Buddha was believed to be a lion amongst the Śākyas (*Śākya-simha*) who was destined to sit on a lion-throne and, therefore, this association of a *simhāsana* with his image was taken to be quite appropriate This formula of Buddha's being seated on a lion-throne—supported on the head of four lions—is not necessarily borrowed from anywhere else or even invented in the Kushāna period As a matter of fact, this formula of the lion-throne—consisting of four lions and supporting the symbolic form of the Buddha—is already present in the most explicit form in the Sarnath Lion-capital In the latter case, four lions seated back to back supported a Dharmchakra which symbolised the Dharmakāyā of Buddha or which is the same thing as Buddha being identical with his Dharma

The Katrā type of Buddha wearing the monk's dress was accepted as the normal form of the seated Buddha image, although in its earliest stages even this type, as is in the case of the Katrā image itself, was designated as Bodhisattva Besides, special forms of Bodhisattva and Buddha images began to be made in the Mathurā school, i e, images of Bodhisattva Maitreya of whom several examples are known in Kushāna art, are always distinguished by a monk's bottle (*amrita-ghata*) held in left hand An image of Kāśyapa Buddha has also been found at Mathurā in the Kushāña period

Thus it appears that on the strength of the comprehensive basic formula comprising a good number of traditional Indian elements the seated and standing types of Bodhisattva images were perfected in the Mathurā school of sculpture Naturally there were variations in the main types due to the intensive ferment of religious thoughts and beliefs amongst the Sarvāstivādi and the Mahāsāmghika teachers whose activity was primarily responsible for the origin of the Buddha image

There are some other types of images noticed in the Mathurā school For example, (1) Bodhisattva Maitreya (future Buddha) of whom several examples are found in Kushāna art, is represented in a standing posture, holding his right hand in *abhaya-mudrā* and an *amrita-ghata* (nectar flask or monk's bottle) in the left For all practical purposes its iconographic formula is as that of the main type of the standing Bodhisattva images but the images are generally smaller in size and not very heavily built (2) Images of Bodhisattva Avalokiteśvara are very rare in Mathurā art (3) Images of the Kāśyapa Buddha have also been found He was one of the seven Mānusha Buddhas but depicted independently of his companions Seven Mānusha Buddhas have already been depicted in the art of Sāñchi, each having his distinct Bodhi tree That tradition was continued in the Kushāna art of Mathurā

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An Inscribed Jain Image from Daulatabad Fort[1]

By

M N DESHPANDE,

Dehra Dun

THE last phase of the rock-cut architectural activity in the Deccan was dominated by the patrons of Jainism, as manifested by the richly carved Jaina caves at Ellora (District Aurangabad), Ankai (District Nasik), Nasik[2], Aihole and Badami (District Bijapur) The last named Caves at Aihole and Badami may be attributed to the later kings of the Early Chalukyan dynasty[3] (Early 8th century A D), while those at Ellora to about the 9th and 10th century A D when the Rāshtrakūta kings held sway over the Deccan[4] The Yādavas, who ruled in the Deccan in the 12th to 13th centuries, appear to have patronised Jainism and flourishing Jaina *bastis* are noticed in and around their capital cities of Chandrādityapura[5] (modern Chandor, District Nasik) and Dēvagiri (modern Daulatabad, District Aurangabad) A few stray examples of Jaina caves belonging to Yādava period have survived at Chandor and Tringalvadi[6] (District Nasik) and Patan (District Jalgaon), but these are comparatively plain and lack the architectural grandeur of the earlier examples at Ellora The only group of rather ornate Yādava period caves is at Ankai and can be attributed to *circa* 11th-12th century A D Besides these rock-cut caves, structural temples dedicated to the worship of Jaina *tirthankaras* were built at several places, and some of these might have been the result of royal patronage At Anjaneri, 15 miles South-West of Nasik, a few Jaina temples have survived and in one of the temples is carved an inscription[7], dated 1014 A D recording a grant of two shops to the Jaina temple of Chandraprabha by Sēunachandra, a Yādava king

It is no wonder that within the precincts of the Daulatabad fort, a number of Jaina temples were built by the tolerant Yādava kings and this is testified to this day by the find of numerous sculptures and architectural members of Jaina origin The temples which once stood here were probably destroyed by Alauddin who captured the fort in the year 1294 A D Recent clearance operations have brought to light a cave, probably of Jaina origin, near the rock-cut moat girting the hill fort

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1 I am indebted to Dr G S Gai, Government Epigraphist for India, who went through the article and made some suggestions

2 The Jaina caves are situated on a hill known as Chamar Tekdi about 5 miles from Nasik

3 From the architectural style, the Jaina caves at Badami though carved in the same hill near the Brahmanical Caves, appear to be removed in time by about two centuries

4 This assumption is not based on direct inscriptional evidence The inscriptions in the Jaina caves at Ellora are not dated, but on palaeographical grounds can be dated to about 9th-10th century A D when Krishna II of the Rāshtrakuta dynasty was ruling This king, like his father Amōghavarsha, is said to have been favourably disposed towards Jainism

5 Chandrāditvapura is mentioned as a town made famous by Dridhaprahāra, the founder of the Yādava dynasty The name appears to have been derived from Chandraprabhaswami, a tirthankara of the Jainas There is a Jaina cave and a structural temple at Chandor the ancient Chandradityapura The place is about 40 miles North-East of Nasik Cousens, *Medieaval Temples of the Dakhan*, pp 49-50

6 Cousens, *Medieaval Temples of the Dakhan*, pp 48-49

7 Pandit Bhagwanlal Indraji, *Ind Ant* , Vol XII, pp 119—129, Cousens, *Medieaval Temples of the Dakhan*, p 45

An inscribed but mutilated Jaina image (Plate VI) was recently found in the Daulatabad fort This is the first dated Jaina image found in the fort and as such is of considerable importance It belongs to the time of the Yādava king Simghana, who came to the throne in 1210 A D

The inscription in question is carved on the pedestal of a completely mutilated image of a *tirthamkara*, in two lines, on either side of the *Mriga-lāñchhana* carved in relief in the centre of the pedestal The *lāñchhana* would suggest that the *tirthamkara* represented is *Śāntinātha* mentioned in the inscription under reference The image is unfortunately damaged so much that the portion above the waist has completely disappeared and what remains is the lower half of the body of the *tirthamkara* From the position of the feet and hands, it can be surmised that the *tirthamkara* was seated in *Padmāsana* with the soles of the feet pointing upwards with his palms, the right one resting on the outstretched left one In the middle of the right palm is carved the *Śrivatsa-lāñchhana* which is star-shaped having a roundish boss in the middle and provided with nine spokes The sculpture in its present condition measures 76 2 centimetres from knee to knee and is 30 5 centimetres in height The original height may have been a little more than 90 centimetres

The inscription carved on the pedestal runs in two lines, the first running across the width of the pedestal on either side of the *Mriga-lāñchhana* and the second line consisting of seven words is carved below the first, at the right end and to the proper left of the *lāñchhana* The record[1] is much obliterated and a few words have disappeared The inscription reads as follows —

1 Siddham[2] (|*) Svasti sri śake 1176 Ānamda sam | Vaiśāsha(kha) su 3 (Bhau)me nvaya Thākura Dēūgi-bhāryā Gau(ri) tat-putra-Śripati-bhāryā Hirā Śāmtinā

2 tvā[3] pranamati nitvam(tyam)||

The inscription tells us that Hirā, wife of Śripati, who was the son of Thākura Dēūgi and his wife Gauri, installed the image of Śāntinātha for perpetual worship, on the 3rd of the bright half of the month of Vaisākha in the cyclic year *Ānanda* in Śaka 1176 (*i e*, Tuesday, the 21st April 1254 A D)

The script of the inscription is in the usual Devanāgari, of about the 13th century A D , and the language of the inscription is Sanskrit prose There is hardly anything of note as far as *orthographical* peculiarities of the inscription are concerned

Among the proper names mentioned Dēūgi calls for comment As in Jaitugi, *ugi* in Dēūgi appears to have been added at the end of the name to form a more popular term of address Thākura-Dēūgi appears to be quite an influential personage and it is not improbable that his son Śripati also was an important official in the service of the Yādava king Simghana The family of Thākura-Dēūgi was apparently devoted to Jainism

1 In the accompanying plate the proper right and left portions of the inscription are grouped together for facilities of reproduction [Ed]

2 Expressed by a symbol

3 About five or six letters after *Śāmtinā* seem to have been lost which may be restored as *tasya Bimbam kāri* to suit the context

FIG 1

- S.N.Ghorpade

• Symbol at the close of a paragraph or section.

DRAWING OF THE SELECT AKṢARAS OF THE MS. J OF the Prākrit Kuvalayamālā

On the Paleography of the palm-leaf

Manuscript of the Kuvalayamālā

By

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There is a palm-leaf Ms of the *Kuvalayamālā* in the Big Bhandāra at Jaisalmer[1], represented by the siglum J in my edition[2] It contains 254 leaves, each leaf measuring 23 by 2 5 inches The breadth noted is obviously at the centre of the widest leaf, because it decreases at some corner or the other and varies from leaf to leaf Muni Śri Jinavijayaji placed at my disposal 54 photographs (put on mounts 15 5 by 12 5 inches) each measuring 11 50 by 9 5 inches and containing some ten pages (of one side of the leaf or the other) of the palm-leaves While arranging the leaves for photographing, a few pages are repeated in different plates In this lot are included the photographs of the wooden boards of the *Candra-prajñapti* and the *Bhagavatī-vṛtti* and of some of the leaves of the *Vilasavatī kathā* The palm-leaves Nos 1 and 254 are written on one side only As it was difficult to read them with naked eyes, I got a few photographs enlarged to 20 by 16 inches, and therein the letters are easily readable, though, due to not-very-sharp focus, some leaves give a blurred appearance The original Ms, I imagine, must be an admirable piece of calligraphic workmanship

The number of lines varies from 4 to 7 on different pages depending on the breadth of suitable writing space available on each side of the leaf Each full-length line contains letters (including *dandas*, etc) ranging from 135 to 140 Excepting the first and the last, all the folios are written on both sides in black ink The written portion on each page gets divided into three parts with space and a hole (for the string) in between them There is margin left at both the ends Some leaves are broken at the ends here and there, and as the photographs indicate, on a few pages, the ink is rubbed Perhaps the letters could be read easily in the original palm-leaves, because what is apparently blurred is duly copied in the transcript prepared directly from the palm-leaves

The leaves bear page-numbers on one side only on the left-side margin (generally at the centre) in symbolic syllables, standing vertically, i e, one below the other, the lowest

[1] C D Dalal and L B Gandhi *A Catalogue of Mss in the Jain Bhandars at Jesalmere*, p 27, also Intro p 42f, G O S XXI, Baroda 1923

[2] *Kuvalayamālā*, critically ed with Various Readings, Singhi Jain Series No 45, Bhāratīya Vidyā Bhavana, Bombay 1960

syllable forming the first place, and on the right-side margin (also at the centre) in numerals written horizontally A careful study of these symbolic syllables discloses that they are practically covered by the excellent table drawn up by Muni Śri PUṆYAVIJAYAJI[1] Some of the symbolic syllables in the photographs of J are covered by the strings One or two deviations I could mark, but they may be looked upon as scribal slips Some of the syllables have a wavy crest on the serif or a couple of dots on the head all this may be either decorative or just a flourish of the pen The zero is also given sometimes a decorative figuration it is faced, on four sides, by four round brackets with inward or outward curve, or its place is taken by a cross, or the sign of multiplication, the angles being filled by round brackets of outward curve

In this Ms every letter is separate, or a unit by itself, and the serif or head-line of one is not connected with that of the other The *padi-mātrā* or *pṛṣṭha-mātrā* is used here and there, but it is less frequent, if not altogether absent, in the first line which has ample blank space for the top-strokes for the vowels *e* and *o* Both *para-savarṇa* and *anusvāra* are used There are instances of *ya-śruti*, but it is not uniformly used Almost uniformly *ṇ* is used everywhere the instances of initial *n* and conjunct *nn* are scarce There is plenty of use of inorganic *t*, or what is often called *ta-śruti*

The Ms J perhaps makes no distinction between *v* and *b*, and it uses the same letter for both of them There are certain letters which look very much alike in some places, for instance, *c* and *v*, *ṭṭha* and *ddha*, *y* and *v*, *bh* and *h*, etc Many of the letters have such a peculiar and old style that a novice might confuse one for the other, some pairs may be noted here by way of illustration *a* and *jh*, *u* and *o*, *ū* and *j*, *e* and *p*, *gh* and *pp*, *gh* and *vv* and *pp*, *tth* and *ddh*, *d* and *r*, *t* and *n*, *n* and *l*, *th* and *vv*, *ph* (second variety) and *d*, *bh* and *ru*, *m* and *s*, *t* and *p*, etc With regard to *u* and *o*, one feels that there is a slight difference in their shape, but it is not always definitive Very often *cch* is written for *ch*, and *cch*, *jjh* and *tth* follow an *anusvāra*, the first two even in a long vowel At times initial doubling as in *ttmo* is seen The sign of *avagraha* is used here and there, of course rarely, and a somewhat peculiar symbol (a round bracket with a stroke below) is used for *m*

In this Ms J verses are not numbered, separation of words is sometimes indicated by very small strokes or dots on the head-line, very often *daṇḍas* are helpful, but they are not put always at the required place, especially in prose In verses, however, single or double *daṇḍa* is used regularly and correctly At times some letters are rubbed out and stand faint they are to be treated as cancelled Sometimes dots are put on letters which are to be omitted, and a stroke below them means striking off of that portion Portions within round brackets are also to be left off There are some marginal additions and corrections, often in a different hand of the later style Big sections in stories are concluded with a symbol which looks like *cha*[2] but between single or double *daṇḍa*

The Ms J opens thus

६० ओ णमो वीतरागाय॥ पढम णमह जिणिद etc.

and ends thus

॥ इति कुवलयमाला नाम सकीर्ण्णकथा परिसमाप्ता ॥
॥ मगल महाश्री ॥ छ ॥ सवत् ११३९ फाल्गु वदि
२ रविदिने लिखितमिद पुस्तकमिति ॥

Thus this Ms is written in *saṃvat* 1139, *i e*, (—56), A D 1083, and so it is nearly 900 years old The concluding sentence, mentioning the date, shows a slightly different hand, but I think, it is written by the same writer

[1] *Jaina-citra-kalpadruma* by S M NAWAB p 63 of the First Section, Ahmedabad 1935, also *Sanmati-prakaraṇa* (Gujarati Intro) by S SANGHAVI and B DOSHI, pp 15-27, Ahmedabad 1932

[2] See the chart of Akṣara-vatikās given along with his paper on p 36

A paleographic study of this Ms by duly handling the original palm-leaves would bring to light many interesting details As already observed by Prof F B J KUIPER [1], J is written in a hand which closely resembles that of pl VI, col XV of BUHLER (taken from a Ms that is only two years older than J), except for the *aksara na* ' The serif or the head or top line of many letters in J is not just a short line above the *aksara*, but often it looks like a wedge (with thick ink) and resembles the s rif of certain letters in pl V, col iii and pl VI, col xiv of BUHLER[2] What is seen as hollow triangle of the serif in the Banswara plates of Bhoja of Dhārā (11th century A D) is thickened with ink in J

It is interesting to study the *aksaras* in J in more details- *a* and *ā* structurally reasemble those in BUHLER VI xv-xvii, but may also be compared with those in V viii and VI xiv what deserves to be noted is the graded thickness of the vertical line with a pointed tip For *i* cf BUHLER V viii, ix and xxi, VI, vi, it is clearly different from that in VI xv The letter *i* in J is peculiar and unlike those noted by BUHLER in plates V and VI, the nearest one in shape being that at VI vii 4, but it resembles the Pratihāra (9th *c* A D) type noted by C SIVARAMAMURTI [3] In its second variety (see the *aksara-vaṭikā* block at the beginning) the top mark is not the usual curved or wavy line but a half-bracket-like hook resembling the upper roundish mark as in BUHLER VI xv 4 or V xxi 4, very much like the present-day hook on the top of Devanāgarī to show that it is *i* For *u* of J, cf BUHLER V iii and VI xv-xvi, its lower hook being more sharp pointed For *ū*, cf BUHLER V xv and VI xv-xvi its wedge-shaped serif is very striking, and it looks very much like *ja* of J for *e*, cf *Ibidem* V vi and VI xv-xvii the sharp point at the bottom, is striking For *o* of J cf BUHLER VI xv-xvi 13, the symbols in which are sufficiently similar to those for *u* J writes *u* and *o* apparently alike There seems to have been some difference, but it is not definitive The forms of these *aksaras* in our chart are taken from a context where the values are definite The letters *u* and *o* in c+*Ojha's*[4], plate xix, the *varna-mālā* from the palm leaf Ms *Usnīsa-vijyaya dhāranī*, deserve comparison In later corrections, which are made in a squarish hand, *o* is represented by *u* with a top-stroke as in later Devānagarī found in Mss like our *P*

For *k* of J, cf BUHLER VI v, xiv and xv, the flourish of it agrees more with that in xiv than that in xv For *kh*, cf *Ibidem* V xvi and VI xiv For *g*, cf Ibid VI xv, but its shape in J is more curvy For *gh*, cf *Ibid*, VI xv-xvi, at times it is similar to that in V xi, etc

For *c* of J, cf BUHLER V iii and also VI xv, its shape is more acute angled in J, and when the interior space is covered by ink it often looks like *r* For *ch*, cf *Ibidem* V xvi and VI xv, it is very much similar to *th* in the conjunct group, and often *cch* stands for *ch* For *j*, cf *Ibid* V xvi, and also VI xiv—xvi For *jh*, cf *Ibid* VI xvi, it is often difficult to distinguish it from *jjh*, and it very much resembles the *aksara* in paragraph 2, Plate XXVI of OJHA

For *ṭ* and *ṭh* of J, cf BŪHLER VI xv For *ḍ*, *Ibid*, VI xvi, at times it looks like *r* when the ink column of the latter is less thick For *dh* cf V xiv For *n*, cf VI xv, it has roundish arms, one of which has a fine point, and by later scribes it is sometimes misread as *l*

For *t* of J cf BŪHLER VI xvii-xvi, the top wedge of our *t* is very thick, for *th* cf *Ibid* V xxi, but often it resembles *tth* For *d* cf VI xv, but its style is very much like that in V iii-xi For *dh* cf VI xv, but the style as in V III—x The structure of *ddh* is somewhat ticklish For *n*, cf, VI xv, but for its style V xiv

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1 Indo-Iranian Journal, I, No 3, p 231

2 These references to BUHLER are to his *Indische Paleographie* in the Grundriss, 1896, with plates, its English translation by J F FLEET in the *Indian Antiquary*, XXXIII, 1904, lately issued along with plates, in *Indian Studies* Past and Present, Calcutta 1959

3 C SIVARAMAMURTI *Indian Epigraphy and South Indian Scripts*, Fig 87, p 181, Madras 1952

4 G H OJHA *The Paleography of India* (2nd ed), Ajmer 1918

For *p* of J, cf BUHLER VI xv For *ph* cf VI xx, but in some places its shape is different (both the types being shown in the chart) and resembles that in V viii (*c* 993 A D) or the Sena type (p 125) noted by C SIVARAMAMURTI[1] For *b* cf VI xii, *b* and *v* are similar, and perhaps the same symbol served the purpose of both in early days The Nāgarī form of both of them was the same for a pretty long time, and the cross-line in the belly of the letter, to mark out *b*, came much later, say by the 13th and 15th century A D For *bh* cf VI xx, but often it gets closed at the lower point For *m* cf VI xv

For *y* of J, cf BUHLER VI xix, but note the parallel bend on both the sides For *r*, cf VI xix-xv, and also V xi, etc, the thick line and daggerlike shape of our *r* are striking For *l* cf VI xv, but the shape of its serif is somewhat different For *v* cf VI xx, its longish and angular shape deserves attention For *ś* cf VI xx it occurs in J only in a few Sanskrit verses, and at times it is written like *s* For *ṣ* cf VI xv, but the style is more similar to those at V xvi and VI x-xi For *s* cf VI xx, but some difference in the shape cf also VI xiii For *h* cf VI xv, but for its style cf V iii and VI xiii For *kṣ* cf VI xv For *jñ* cf V x 44, our symbol is more roundish

From the above detailed observations it is seen that most of the *aksaras* of the Ms J have a close resemblance with those recorded by BUHLER in plate VI, column xx He has drawn them from a palm-leaf Ms of the Sanskrit commentary of Kotyācārya on the *Viśesāvaśyaka* of Jinabhadragani (together with some supplements from the Royal Asiatic Society's *Ganaratnamahodadhi* of A D 1229), now deposited in the Bhandarkar O R Institute, Poona I have personally inspected this Ms [2], with a view to have precise palaeographic comparison of it (V) with J Both V and J contain Jaina works, they belong originally to Jaina Bhandāras, and possibly hail from nearly the same area V is written in *Sam* 1138 Pausa and J in *Sam* 1139 Phalguna, that is, V is older than J by a year and two months The writing of V is strikingly clear, though some of its leaves are damaged and even broken to pieces, possibly, for its age, it is adversely exposed to weather and repeatedly handled J has its leaves, however, quite intact, and my impression is that it is not much handled The *aksaras* of J, in most cases, have a close structural resemblance with those of V Some letters in these have clearly different patterns, for instance, *i*, *ī*, *n*, *ph* (second variety), and even *d* and *dh* Despite these structural resemblances between many letters in V and J, the appearance and impression of the written matter that one gets are different Some of the apparent reasons are as below In V letters are squarish, but in J, longish, angular and slanting In V serifs or headlines are flat, straight and mutually not very much detached, but in J, their shape, in most of the letters, is peculiar and different they are wedge-shaped, often show a pool of ink at the head, stand mutually detached and do not generally extend beyond the body of the letter, especially on the right side, as in V In V lower point of the letters is often blunt, but in J generally slanting and as a rule pointed The pool of ink

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[1] See C *Sivaramamurti's* book noted above, pp 127 and 140

[2] See *A Catalogue of the Govt Collection of* Mss deposited in the Deccan College, XII, Collection of 1880-81, p 169, No 57 Luckily I could spot the concluding leaf The Ms ends thus

-समाप्तमिद विशेपावश्यकम् ॥ छ ॥ कृतिजिनभद्रगणिक्षमा श्रमणपूज्यपादाना ॥ छ ॥ भाष्य समायिकस्य स्फुटविकट पदार्थोपगूढ यदेतच्छ्रीमत्पूज्यैरकारि क्षत-कलुषधिया भूरिसस्कारकारि । तस्य व्याख्यानमात्र किमपि विदधता -यन्मया पुण्यमाप्त । प्रेत्याह द्राग्लभेय परमपरिमिता प्रीतिमत्रव तेन ॥ ॥ लिखित पुस्तक चेद नेमिकुमारसज्ञिना । प्राग्वाटकुलजातेन शुद्धाक्षरविलेखिना ॥ स ११३८ पोष वदि ॥ ० ॥

[Then in a different hand] कोट्याचार्यकृता टीका समाप्तेति ॥ छ ॥ [Then in a different hand] ग्रथाग्रसस्या त्रयोदशसहस्राणि सप्तशताधिकानि ॥१३७०००॥ पुस्तक चेद विश्रुतश्रीजिनेश्वरसूरिशिष्यस्य जिणवल्लभगणेरिति"

Syllabic numbering of the pages seems to be original, numeral pagination is perhaps put later The first folio is pasted on paper by Prof E LEUMANN, and he has left a note on the sheet like this 'pasted by Ernst Leumann of Strassburg Alsatia'

at the top, slanting lines and pointed ends of *aksaras* raise a suspicion whether J is written with a fine brush This is not unlikely, but these, according to expert opinion, can develop even when written by a wooden quill, with a graded point

Though V and J come from nearly the same locality and are of the same age, they illustrate two styles of writing though structurally majority of *aksaras* is of the same pattern The squarish handwriting in V can be favourably compared with that found in some old palm-leaf Mss at Jaisalmer and other places in Western India[1] The writing of J, as seen above, is a little angular and cursive, with wedge-shaped serif, the line of writing showing different thickness occasioned by the point of the quill (or brush ?) and the quantity of the ink at different places This style has close resemblance with the one found in the palm-leaf Mss of Nepal and Eastern India, from which specimens are drawn by BUHLER in plate VI, columns xiii-xiv It is not unlikely that the copyist of J comes from Eastern India or is more accustomed to the style of writing seen in palm-leaf Mss like the *Astasahasrikā prajñā-pāramitā* of the late 12th centrury A D, belonging to the Prince of Wales Museum, Bombay[2] or the NI plam-leaf Ms of the *Rāmāyana*, dated A D 1020, belonging to the Bir Library, Kathmandu, Nepal[3] or in the Ms of the *Āryagandavyuha-mahāyāna-sutra-ratna-rājah*[4] A palm-leaf Ms of the *Upadesamālā*, with the *Heyopādeya-vrtti*, was an interesting item for me in the exhibition of Mss arranged at the time of the session of the All-India Oriental Conference, Ahmedabad, 1953 Its writing very closely resembles that of the Ms J of *Kuvalayamālā* On an inquiry Muni Śri PUNYAVIJAYAJI told me that the Ms belongs to his collection and can be assigned to the 12th century (of the Vikrama era ?) One can have a fairly correct idea of the script of J from the chart of select *aksaras* carefully traced and given along with this paper and also from the photograph of a few leaves reproduced elsewhere[5]

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[1] See the photographs (Nos 2 and 3) of the Mss *Upadeśapadatikā*, dated *Samvat* 1212 *Bhagavad-gitā-(Śām kara-bhāsya*, dated *sam* 1300, in the *Bharatiya Vidya*, part 3, pp 240-241, ed by Sri JINA VIJAYA MUNI, Bombay 1945 See also Citra Nos 11-15, in the *Jaina-citra-kalpa-druma*, at the close of Muni *Punyavijayaji's* essay, *Bhāratiya Jaina Sramana samskrti ane lekhana-kalā* Ahmedabad 1936

[2] P CHANDRA Indian Illustrated Mss, *The Times of India Annual*, Bombay 1960 pp 42 ff

[3] Reproduced in the *Vālmiki-Rāmāyana*, critical edition, Vol I, Fascicule L, Oriental Institute Baroda 1958

[4] Two folios of this in photographic print were shown to me by my Professor, Dr P L VAIDYA, Poona This Ms of the *Gandavyūha* belongs to the Library of Oriental Institute, Baroda and bears No 13208 The size is 61 5 cm by 27 2 cm with 9 lines to a page and about 98 letters to a line It is a paper Ms white on one side and yellow on the other in the fashion of Nepalese Mss It was procured by the Institute from Vajrācārya monastery in Kathmandu The folios are 2'8 in number

[5] *Bulletin* of the S O A S, London vol XII, parts 3 and 4, 1948, plate No 3, which reproduces three leaves of J

Observations on Indian Art

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Art is the creation of beauty Creation is the expression of the self through a reinterpretation of the pattern of being Beauty is the conception of harmony in the ordering of things The creation of beauty involves the articulation of the conception of harmony through diverse media of life

Every society has its own idea of the harmony of things, which exhibits a historical tendency in correlation with the entire evolution of its life-form This idea shapes and conditions its attitude and approach to the world and expresses itself in an outlook, philosophy and *weltanschauung*, that determine the peculiar styles and standards of its life But, though it is manifest in all aspects of life, its concentrated essence is embodied in some special kinds of works, which go by the name of art

Indian society and culture has also its own conception of harmony characterised by the integration of the particular and the general or the individual and the cosmos According to the Indian view, the entire scheme of being is organic and dynamic It is constant movement governed by definite laws and marked by clear tendencies It is world-as-becoming or world-as-history, *Kālaprajāpati*, mentioned in the *Atharvaveda* (XIX, 54), or *Virāta-rūpa*, described in the *Bhagavadgītā* (IX, 32), creating and destroying, producing and consuming, expanding and contracting It is both growth (*anugraha*) and decay (*vinaśyatā*), both new (*vāma*) and old (*palita*), both dynamic (*yat*) and static (*ju*) It represents an integration of social forces with natural elements inasmuch as both social organisation and cosmic evolution proceed from it (*Rgveda* X, 99) It involves the synthesis of the processes of evolution and involution like the efflorescence of the seed into the flower and the reduction of the flower back into the seed or the expansion of the centre in the circle and the contraction of the circumference into it or the merging of the microcosm into the macrocosm and the incarnation of the universal spirit in the individual existence

The scheme of being as ordered movement, regulated dynamism and integrated development lies at the basis of Indian art Śiva Naṭarāja, performing the cosmic dance, Varāha Avatāra, protruding and advancing and rescuing the frail body of the earth from the primeval watery chaos, Visnu moving the Sudarsana cakra, etc, are different symbols of this idea of harmony In their figures we find the cosmic rhythm, the perpetual agitation (*ksobha*) of elements and the interminable undulations of the universal process Visnu reclining on the Śesa in the primeval ocean and Śiva breaking forth in the tāndava dance in the spatio-temporal sphere are two aspects of this tendency of being

The universal process betrays a well-defined rhythm, it is the dance with everchanging poses, the music with everflowing notes, the drama with everprogressing action, the epic with eversurging *rasas* Hence its reflex in art is also marked by a rippling movement In Indian sculpture and painting almost every figure seems to tell a tale in the language of *nātya* The mobile legs, tilted waist, curved hands, undulating fingers, bursting lips, and

limpid eyes follow a particular pose of dance pregnant with rhythmic symbolism In Sanskrit dramas all the stage directions follow the precepts of *nātya* and the actors obey them in every movement and performance so that in every scene there is a unique synthesis of dance, poetry and action Likewise, at Ajanta, for instance, in the figure of Padmapāni, there is a singular dynamism in the body bespeaking a creative imperative and at Mathurā, in the figures of the sālabhanjikās, there is a trenchent agitation of limbs, which seeks to synthesise the women and the trees into a harmonic interaction The Asoka trees, flowering by the touch of the toe of the damsel, or the Karnikāra, opening its buds to watch her dance, symbolise and emphasise the inherent unity of creative nature, or the incessant *yajña*, in which Indra and Agni yearn for Soma and Anna and the latter nourish and buoy them, or life , to sustain itself, craves for matter, and matter, to animate itself, sticks to life

Indian art shows an unending movement Almost every piece of sculpture and painting throbs with action and agility Even the serene countenance of the Buddha is full of radiant vitality, which illumines the atmosphere The slight flexion of the body (*abhanga* pose), in which the weight is thrust onto the right hip, eases the frontality of the pose and imparts a sense of movement to the figure In the standing image from Sarnath, dated 474 A D , the upraised right palm, with the fingers in movement, stresses the gentle tone, which is to flow from the lips, and in the seated image, in the British Museum, the sinuous flexions of the palms and the fingers, coupled with the deep downcast look and the wavy lips, reveal a dynamism, which is the hallmark of spirituality The face of this image, with slightly protuberant cheeks, indicative of the mood to speak, contrasts with that of another standing figure, showing subdued cheeks in a pensive and assuring mood, as well as that of the seated figure from Mankuar in the Lucknow Museum, exhibiting a soft radiance of smile In course of time, the poise, composure and serenity of the Buddha figure of the Gupta age gives place to the delicacy, affluence and sensuousness of those of the Pāla period The figure of Avalokitesvara with Tārā in the mountain cave at Kurkihar, or that from Bhagalpur, reveals a unique human sensitiveness and fleshiness Likewise, the majestic Śiva and Pārvati images at Ellora and Elephanta, the standing Visnu images at Khajuraho, Sultanpur, Murshidabad and Konārka, the standing sun-god types at Vikramapur, Rajmahal and Chapra and the many seated images of Bodhisattva and Tārā and Śiva and Chandi of Bengal, Bihar, Kalinga, Central India and Rajputana, seem to burst and bristle with a singular harmony and rhythm The cosmic Visnu from Kanauj (8th century), with a nimbus thickly set with gods, angels the sun and the planets, is so full of animation as to appear to step out of the pedestal to the devotee At Ajanta, Ellora and Bagh we see the interminable drama of life in all its fullness, agility and verve

Creative nature is a drama of the growth and decay of infinite life-forms The procreation of life involves a relationship of elements, which goes by the name of sex According to the *Śaiva* Tantras, *Śiva* or *Prakāsa*, abstract luminous thought, penetrates into *Śakti* or *Vimarśa*, the inherent activity of thought and produces *Aham* (egohood) *Prakāśa* is called *Śvetabindu*, *Vimarśa* is known as *Lohitabindu* and their union is described as *Śyāmabindu* All these three states constitute *Mahābindu* Their synthesis is *Mithuna-pinda* (couple in unity), *Kāmakalā* (erotic art) or *Tripurasundari* (the beauty of the three worlds) Corresponding to these terms in Buddhist Tantras are *Prajnā* and *Upāya*, combined in *Yuganaddha*, *Śunyatā* and *Karunā*, united in *Bodhichitta*, *Heruka* and *Vārāhi*, embraced in *Avadhuti-mandala* and *Yogin* and *Mudrā* synthesised in *mahāsukha*, Analogous to these ideas in Vaisnavism are *Krsna* and *Rādhā*, *Rasa* and *Rathi* and *Kāma* and *Madana*, united in *Nitya-vrndāvana* The cosmic process, indicated by these terms is the same as the procreation of children through the cohabitation of man and woman and the production of grain by digging the earth with the plough and depositing the seed in the furrow Hence early man recognised the identity of the

procreative and the agricultural processes and based his religion and art on it In India the worship of the *Linga* (Penis) and the *Yoni* (Vulva) is fairly old, perhaps of Harappan origin But here the spirit of plastic harmony was not content with this crude, abstract and mysterious symbolism and expressed itself in the beautiful images of Ardha-nārīśvara, like the one, recently discovered at Tiruvenkadu in South India and executed in the 29th year of the reign of Rājādhirāja Cola about 1045 A D In it the limpid femininity of the left side of the body is fused with the robust masculinity of the right side, in an organic synthesis This solid bronze 40" high is the finest specimen of South Indian pieces in its dynamism and lyricism Likewise, the crowding of the numerous *mithunas* in erotic and sexual poses on the panels of the temples of Khajuraho, Bhuvaneśvara and Konārka bring into bold relief the exuberance and proliferation of fertile nature impregnated by the procreative forces Such sexual scenes in spiritual centres embody the proclamation of the Lord in the *Gītā*, (VII, 11) that he is *Kāma* reconciled to *Dharma* (*dharmaviruddho bhutesu Kāmosmi bharatarsabhah*) or his enunciation elsewhere in the same text that he is the father discharging the seed in the vagina of the universe (*tāsām brahma mahadyonir aham bijapradah pitā*) [*Gītā*, XIV, 4] What is obscene and ugly from the individual standpoint becomes sublime and superb in a cosmic context Thus, beauty in Indian art becomes the synthesis of sensuousness and spirituality, worldy elegance and divine grace and material richness and celestial composure

The aforesaid outlook generates humanism and cosmopolitanism in the ideals of life According to the Indian view, God is not something different and distinct from the world He is rather the world As Gaudapāda says, 'Creation is the expression of God' (*devasvaisa svabhāvoyam*) (*Kārikā I*, 6-9) or as the *Gītā* says, the Lord does not create the world, He inheres into it, so that 'it is his own self' (*svabhavastu pravartate*) (*Gītā, V*, 14) The bull with three aspects, such as is depicted on the seals of Mohenjodaro, symbolising nature, run by the three forces of mind, life and matter, declares with a roar that the great god descends among men in the world (*tridhā baddho vrsabho rauravīti mahādevo martyān āvivesa*) In a twelfth century bronze from Nepal or the North Gangetic plain, deposited in the Ashmolean Museum at Oxford, there is a beautiful lotus, with each petal carrying a small figure of one of the avatāras of Visnu, Varāha, Krisna, Narasimha, Rāma, Vāmana, Buddha (?) and Paraśurāma and a Visnu in the centre This seems to be a unique representation of God in the midst of men, animals and plants and is another version of the idea, embodied in the picture of the Lord, surrounded by the animals, analogous to Paśupati, on the proto-historic seal from Mohenjodaro This shows that for well over three thousand years the same conception of the unity of the creator and the creation dominated Indian thought and art

Man is nearest to the creator (*puruso vaiprajāpater-nedisthah*), according to the *Śatapatha-brāhmana* As man is the culmination of the process of natural evolution, the microcosmic essence of the universe, he embodies the divine potentiality and represents God (*Isvarahsarvabhūtānām hrddeserjuna tistati*) (*Gītā XVIII*, 61) Hence man is the height of perfection in the universe, 'nothing is better than man' (*na mānusācchresthataram hi kiñcit*), as the *Mahābhārata* sums up, 'above all is man, the truth, beyond him is nothing' (*sabār upare mānus satya tāhār upare nai*), as the Bengali poet Candidāsa sings But man, the receptacle of the divine, is the universal man, the world citizen, defying the distinctions of class, colour, creed and country His representation in art as Visnu or Buddha or Jina is the supreme creation of the Indian mind It is significant that there is hardly any individual portrait in Indian art, just as there is little regard for individual life or its events in Indian history On the contrary, we have grand specimens of the cosmopolitan man, considered as the repository of divine virtues, in Indian art, literature and philosophy

The cosmopolitan humanism of Indian art and culture manifests itself in concrete, corporeal and plastic figures The Indian spirit shuns the abstract, the amorphous and the mysterious

and tries to give tangible and perceptible forms to all concepts and ideals It has presented worldy dutifulness as Rāma, compressed spiritual dynamism as Kṛṣṇa, congealed universal compassion as Buddha, concretised self-conquest as Jina, personified transcendental knowledge as Śaṁkarācārya and embodied personal devotion as Sūr, Tulsī and Mīrā To an Indian, these figures are not merely historical personalities but also embodiments of particular sets of values, characterised by universal validity To him, man and value are inextricably mixed up and idols and ideals are identical Hence he is not satisfied with abstract symbols like the enigmatic and mysterious *linga* and invests it with a serene composed and profound human figure as in the Ekamukhī and Caturmukhī lingas of the Gupta period found at Khoh and other places Likewise, he is not content with the representation of the Buddha through symbols like the elephant, horse wheel, etc , and is restive to depict him in human form The origin of the Buddha image is much disputed and debated among scholars Foucher, Marshall, Vogel, Tarn, etc , hold that the Buddha image is of Greek origin, Lamotte thinks that it made its first appearance in the region extending from Nagarahara and Hadda in the west to Taxila in the east and from Chitral and Chakdarra in the north up to the confluence of the Kurram with the Indus in the South during the reign of the Indo-Greek King Archebuis between 100 B C , and 87 B C , Coomaraswamy, Cohn, Goloubew, Fischer, Konow, Mus and others believe that it was first made by the sculptors of Mathurā on the model of the statues of the Nāgas and the Yakṣas , Waldschmidt opines that it came to birth independently in Gandhara and at Mathurā Without going into this controversy, we can state that about the beginning of the Christian era, as a result of the impact of new ideas and the growth of new devotional tendencies, the concept of the Buddha-figure transcended the sphere of symbols and assumed a bodily form of rare refinement, elegance and charm As said above, it reached the height of perfection in the Gupta age and tended towards a sensuous mellowness in the Pāla period

Usually scholars discuss the dichotomy of classic and romantic in art These concepts are connected with the Graeco-Roman and Gothic-Teutonic traditions of European art, which Spengler calls 'Apollonian' and 'Faustian', and Sorokin terms 'sensate' and 'ideational', respectively Broadly speaking, the classic, Apollonian or sensate art is bound up with the finite, the concrete and the tangible , whereas the romantic, Faustian or ideational art soars up into the infinite, the abstract and the formless While the classicist doggedly clings to the finite and abhors the infinite, the romantic passionately yearns to break loose of the finite and desperately struggles to shake himself free from the bondage of form in order to plunge and merge in the infinite Addressing the west wind the poet Shelley sings —

> Lift me as a leaf, a blade a cloud,
> I fall on the thorns of life, I bleed

This passion to escape from the finite into the infinite is the credo of the romantic We find its artistic expression in the high and deep vaults of Gothic cathedrals, where long, conical windows, set with panes of coloured glasses, admit distant streaks of light, conveying the ideas of vastness and profundity They contrast with the pillared porticoes, surmounted by sculptured friezes or column-halls with flat lintels characteristic of Graeco-Roman buildings and giving the impression of the concrete and solid finite In Indian art we cannot mark out any such distinction between the classic and the romantic Though this art is concerned with plastic corporeality, it also aims at broad universality It tries to catch the infinite in the finite and then widen that finite into infinite It does this by abridging the cosmic process into the individual form and then by developing it into the universal aspect For it, the concrete, the tangible and the individual are only mirrors to reflect the abstract, the infinite and the universal In Gupta art, for instance, we find a unique perfection of the human figure It exhibits a rare combination of symmetry, harmony, proportion, balance and poise The lovely face with chiselled features, tranquil look and soft serene smile fits into the elegantly formed body with tender limbs

A 2313—8 A

covered with diaphanous drapery But the figure is not an individual portrait, it has a cosmic expression It conveys some general aspects forming part of the conception of the universal man The half-shut eyes set in calm, composed face, take us to supra-personal levels, shading off into expanses of infinity This is true of the faces of the Ekamukhī and Caturmukhī lingas as well as of Visnu and Buddha Here the finite is only a medium for the communication of the infinite Thus there is a synthesis of what are called 'classic' and 'romantic'

The trends of art can also be classed as realism and idealism Realistic art is representational, imitative and scenic, idealistic art is transcendental, conceptual and symbolic But very often these categories overlap each other This is particularly true of Indian art, where the distinction of real and ideal hardly obtains At Bharhut, Amravati and Ajanta the representation of life in its manifold aspects gives us a glimpse into ancient cultural settings, the dress, deportment, ornamentation, dwellings, processions, courts concerts etc, seem to possess a photographic quality, but they are all transmuted into higher levels of existence, which lapse into the universal, abstract and infinite.

What matters in a work of art is not the body but the mind "It is not the form that one should seek to understand, but the seer of form" (*na rūpam vijijñāsīta rūpa drastāram viddhi*) *Kausitaki Upanisad, III*, 8 "Verily not for the sake of the worlds are the worlds dear, but the worlds are dear for the sake of the self (*na vā are lokānāma kāmāya lokāh priyā bhavanti, ātmanastu kāmāya lokāh priyā bhavanti*) *Brhadāranyaka Upanisad II*, 4, 5 Addressing the monks, the Buddha once asked "Brethren, have ye ever seen a picture called a masterpiece (*carana*)?" "Yes, Master," replied the monks "Well, brethren," explained the Buddha, "this so-called masterpiece is thought out by the mind (*cittam cittam 'eva cintitam'*) Wherefore, brethren the mind is even more diverse than that masterpiece" (*Samyutta Nikāya III, p* 151) This dialogue is also cited by Buddhaghosa in his *Atthasālini* (p 64), where he makes the Buddha remark that "the masterpiece of art is designed by the mind," which is "even more artistic than that masterpiece" Accordingly, an image is not a physical likeness but a shape and form of art, embodying mainly the creation of the mind and thus having little affinity to objective reality (*uddisikam avatthukam manamattakam*) *Jātaka Vol* IV, p 228 A painting does not consist in colour splashes or complexes, but in the conceptions emanating from the mind and heart of the artist (*range na vidyate citram tattvam hyaksara-varjitam Lankāvatarasutra* Vol II, pp 117-118) All gods and goddesses, whether sculptured or painted, are *dhyāna-rupas of śunyatā*, or, in the terminology of the Upanisad, the formulation of the *prajñāmātrā* into the *bhutamātrā* (*Kausitakī Upanisad III*, 7) From this point of view art is conceptional in character

As said above, art involves the interpretation of harmony or what is called *lokasamgraha* in the *Gītā* (III, 20) Harmony, natural and social, is the good and the beneficent Hence art is always for the good, it seeks to dispel sin and evil (*yaducyate pārvati pāpavrttaye na rūpamityavyabhicāri tadvacah* Kālidāsa, *Kumārasambhava*, V, 36) But in the dynamic and fluxional universe the patterns of harmony are kaleidoscopic in character and have to be reconstructed and reinterpreted even once in a while Hence there is a recurrent renovation, a perpetual transformation and an incessant renaissance in the conceptual conspectus of art Even though its formal aspect remains the same, its conceptual content changes and its expression of harmony is renewed But, since it is an object of beauty and tends to express harmony, its appeal never completely fades or dies, but is renewed and transformed through new conceptual configurations This is why an object of art is always new, fresh and hilarious "The nature of beauty is that it is new every moment" (*ksane ksane yannavatām vidhatte tadeva rūpam ramanīyatāyāh* Māgha, *Sisupāla-vadha*, IV, 17)

A 2313—8 B

Some Unpublished Images of Varāha and Kubera from Gujarat

By

M A Dhaky

The worship of Vishnu and his incarnations, Varāha in particular, received greater impetus since the days of Gupta Emperor Chandragupta II, though there never was any moment when Śiva worship suffered diminution Gujarat came to possess a temple to Vishnu at Girinagara (Junagarh) in the time of Skandagupta in about 455 A D or slightly earlier[1] And thereafter a few notable edifices sacred to Vishnu were erected during the period of the Maitrakas of Valabhī, one at Kadvar near Prabhas and two others atop the hill at Ghumali in the Barada Hills, both located in the Saurashtra territory of Gujarat State

The well-known Old Temple at Kadvar, which goes by the name of Varāha temple, could not have been exclusively dedicated to Varāha since the oblong plan of the cella is indicative of the presence probably of all the ten incarnations of Vishnu, though there are evidences to believe that some sort of primacy was accorded to Varāha in this temple[2] The image is still preserved (though not in its original position) in the sanctum (Pl VI Fig 1)[3] Both the temple as well as the image are attributable to the first quarter of 7th century[4] This image is perhaps the earliest Varāha image known from Gujarat

The second image (Pl VII Fig 10), which i from the Sonkansārī group of temples on the hill at Ghumali, did not belong to either of the two temples founded during Maitraka Period in late 7th century There are three other shrines of the subsequent Saindhava Period and are attributable on stylistic grounds to 9th century That all these temples were dedicated to Vishnu, is borne out by the discovery of a number of images of Vishnu, some fragmentary, to the exclusion of other deities[5] Stylistically they range between 7th and 9th century and admirably fit in the chronological sequence of the temples there The image of Varāha in question seems to belong to this group and possibly to Temple No 5 The Varāha under reference has a pretension of a cult image and does not seem to be one of the *parivāra devatās* occupying some niche on the exterior wall of the temple[6]

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[1]Skandagupta's inscription at the Asoka-rock at Junagadh refers to the erection of this temple

[2]The point has been discussed at length by J M Nanavati and the present author in their monograph *The Maitraka and the Saindhava temples of Gujarat* appearing shortly as an exclusive number of '*Artibus Asiae*'

[3]It is stationed in a sombre North-West corner encompassed by a later *parikara* It is difficult to obtain a good photograph of this image For its sketch, See Cousens, H, *Somanatha and other Mediaeval Temples of Kathiawad*, Pl XXV

[4]The detailed discussion will be found in the monograph mentioned under note No 2

[5]With the exception of one image which is in Watson Museum, Rajkot, all the rest are on display in Jamnagar Museum

[6]Varāha is found to occupy the northern *bhadra* niche in the Vishnu shrine (No IV) and another vanished one at Roda both attributable to last quarter of 8th century The contemporary Vishnu shrine at Than possesses a similar Varaha image in the back niche None of these images are as broad as this one In fact the niches of the extant temples on the hill at Ghumali do not agree with the dimensions of this Varāha image Hence it may be concluded, it is a cult image

The present image on comparison to the image from Kadvar reveals for certain some advances in style which quicken its placement to a relatively later date The Kadvar example, two-armed and simply decorated, demonstrates an affiliation in general mannerism to the Udayagiri-Eran Varāha images of the Gupta Period The image from Ghumali suggests a decided involvement in the ornaments as well as in the presence of two additional upper arms carrying respectively the attributes *gadā* and *chakra* Dwarfish and plump though is Kadvar image, and posed in a like manner, there is one difference which qualifies it once again as belonging to a later period There is a poise, a tense concentration of energy in the Varāha from Kadvar which are replaced by a bravado in Ghumali example, suggested by the widening of the feet, twisting of the arms and a greater tilt of the head forced by the carver The Kadvar image is still faithful to the Gupta idiom , Ghumali image, by contrast, heralds mediaeval developments

The precise date of the sculpture is difficult to arrive at The boar-face can be of little assistance in fixing its age The face of Bhūdevī upheld on the shoulder and a female attendant at the back are not well-defined That of Sesha (who is reclining in supplication) is indistinct in the illustration but its light wig is of the kind normally not encountered after 9th century The *vanamālā* studded with large pearls also tallies with the examples ranging between 8th and 9th century from Rajasthan and Gujarat The overall impression of the image favours 9th century as the probable age of its execution

The third image (Pl VII Fig 11) of Varāha was acquired some years back from Miyani for Junagadh Museum alongwith two images of Vishnu Miyani is situated some 22 miles North-West of Porbandar and possesses a group of temples differing in style and ranging in date from 7th to early 13th century It is not possible to connect any one of the existing temples to this image or to the two aforementioned images of Vishnu It is possible that the original shrine of Vishnu has disappeared The face, the lower left arm and the legs of the image are mutilated, as also the head of Bhūdevī which is missing The necklaces, the *upavita* and *vanamālā* and *karanda mukuta* are all beautifully bejewelled and well finished Varāha is no longer stunted The body is finely chiselled though inner vigour is no more so striking The position of Bhūdevī also differs , the goddess has been dramatically supported on the strong arm of the Varāha The details of the ornaments, the posture and the proportions of the torso and limbs align with the tenth century sculptures from Western India which are still found on the temple walls of that age One has only to look at the figures found on the temples at Jagat, Kotai and Kekind for parallels

The three images of Varāha thus illustrate a progressive change of style experienced in the same art province

KUBERA IMAGES

Each one of the three images in the second set, now of Kubera, comes from a different site in Northern Gujarat The first one (Pl VIII Fig 3) is from Sidhpur (Siddhapura), Śrīsthala of the early Solankī Period Mūlarāja I had founded here the temple of Rudra-mahālaya which was replaced by a colossal by Jayasimha Siddharāja temple in the second quarter of 12th century The image under discussion is two-armed, is holding a cup in the left hand and money bag (*nakulaka*) in the right He is sitting on a *padmapitha* The eyes are prominently carved as though to receive artificial (metallic ?) eyelids The nose is badly eroded while the lips have suffered mutilation The most interesting feature is the loose *jatā* or *ālaka* above the head

The date of the image may be ascertained by its style which is seemingly 10th century The fine ornaments, sparsely but tastefully carved, are of that age The wig indicating *dakshināvarta kesa* had persisted in Gujarat till this period as a number of Kumāra figures on the pillar-brackets in the temples in Gujarat amply endorse

The second image (Pl IX Fig 14) is from Gunja near Visnagar The village possesses an old reservoir and a ruined shrine on its bank

both of late 11th century A D The present image is still lying in the temple of Śiva to the east of the village In the right hand it perhaps held a *kalaśa* In the left one is the usual money bag The thinly carved ornaments and the facial type do not suggest a date earlier than the end of eleventh century A D for this image

The third image (Pl IX Fig 15) is from Asoda where a notable pañchāyatana shrine of Śiva of early 12th century A D is still in existence Kubera in this example sits on a *bhadrapītha* The details of the *vastropavita*, *hāra* and *keyura* are not worked out Two *mālādhara* figures fly at the back The squarish face, so typical of the days of Siddharāja, betrays its age to be early 12th century A D

All the three sandstone images are two-armed and show the same posture All of them possess the corpulance characteristic of Kubera The typical *vāhana* of Kubera, the elephant, is likewise absent in all the three examples Kubera in none of these images, it would seem, was carved in his capacity of the Regent of the Northern Quarters normally stationed on the northern *karna* of the wall-face of the mediaeval temples Here he seems to figure in his own right and as indicated by the presence of the backdrop in each case, all these images were *upāsya murtih* (cult images)

That brings in an interesting notice in this context The iconic worship of Kubera, was fairly popular in Northern India during pre-Christian days Though it seems to have fallen out of favour afterwards in Brahmanical pantheon, the Buddhists at least, from the 2nd century, venerated him as Jambhāla and his popularity was greatly increased in the times that immediately followed the Gupta Period In Western India during 8th century, the resurgent Jainism adopted him as Yaksha Sarvānubhuti and is very commonly seen in the Jain temples of the early mediaeval period Perhaps these circumstances may have been instrumental in the revival of Kubera worship, apropos of Brahmanism in Northern Gujarat, as evidenced by the oldest of the trio discussed here and another one of the same age now worshipped at Shamlaji by the local populace as Udumbara Rsi[1] What is significant is the persistence of Kubera worship as late as early 12th century as evinced by the images from Gunja and Asoda Whether Kubera was worshipped under his own name or under the disguise of some local form (*grāma-devatā*) in those days, we shall never know unless some light is shed by the epigraphic or literary sources

[1]See *Chronology of Gujarat*, V I, plate XLVII (A)

Buxar Terracottas

By

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Buxar is the headquarters of the sub-division of Buxar in the district of Shahabad, Bihar Buxar, has a hoary past and has yielded numerous archaeological remains A large number of terracottas from Buxar are exhibited in the Patna museum They show an evolution of technique and envisage a continuous history of development However, in view of the fact that there is no record of these being found in stratigraphic sequence, the story of the evolution and the sequential chronology suffered from a vital lacuna

The Directorate of Archaeology, Government of Bihar, undertook excavations at Buxar in 1963-64 The results were very promising in many respects So far as the terracottas are concerned, they were found in definite stratigraphic sequence, pointing to the evolution and difference in technique of pottery making from one culture to another Period I was a pre-NBP culture The associated pottery was black, grey and red pottery The black pottery was of very fine and thin fabric and common types were wheel made bowl, bowl with internally knobbed base and dish This pre-NBP Period I also yielded six terracottas—4 animal figures and two female figurines (Plate XI) This was a very important discovery Pre-NBP terracottas have been rarely reported from ancient sites scientifically excavated The terracottas are hand-made and what is most important is that the animal figurines are painted with horizontal parallel lines in yellow colour Terracottas that have been reported from Hastinapura from Pre-NBP level are much more crudely handled and have no paintings on them The two female figurines are beautiful The eyes are incised, nose pinched, breasts full and rounded, and one figure is wearing punched ear-lobes The technique though primitive, is quite successful, and the modelling shows good craftsmanship The hand and the figures of the broken female torso have been very naturally made, resting on the knee The importance of these finds is that we have now a positive idea about the art of making clay-figurines *in the period before 600 B C in the Central* Gangetic Valley Buxar is associated with the Epic heros Rāma, Lakshmana and Vishvāmitra and their struggle with the Asuras like Tādikā and Subāhu It is therefore very likely that in future more extensive excavations might throw some significant light on the asura culture here

Period-II is marked with the appearance of the NBP, along with red, black and grey wares There was thus no abrupt break A new ceramic tradition has appeared, probably begun, further east in Magadha, and spread as we knew practically throughout North India, or part of Central India and lower Deccan

A number of terracottas were found in Period-II In all nine of these are illustrated here (Pl X, Figs 16 and 17) A comparative study of these plates with the earlier plate showing terracottas of the pre-NBP level will at once show the great advance made in the art of making terracottas The figures are much better modelled, the head-dresses and other decorations are much more prominent and numerous The popularity of use of 'wheel' as a decorative motif deserves special notice Has it do with the Dharmachakra of the Buddhists? If it is pre-Asokan, we get probably the first archaeological representations of it associated with human

10 Varāha from Ghumli
Circa 9th century A D
Junagadh Museum

11 Varāha from Miyani
Circa 10th century A D
Junagadh Museum
(Courtesy, Department of Archæology, Gujarat State)

12 Varāha, Miyanī
Circa 10th century A D
Junagadh Museum
(Courtesy, Department of Archæology, Gujarat State)

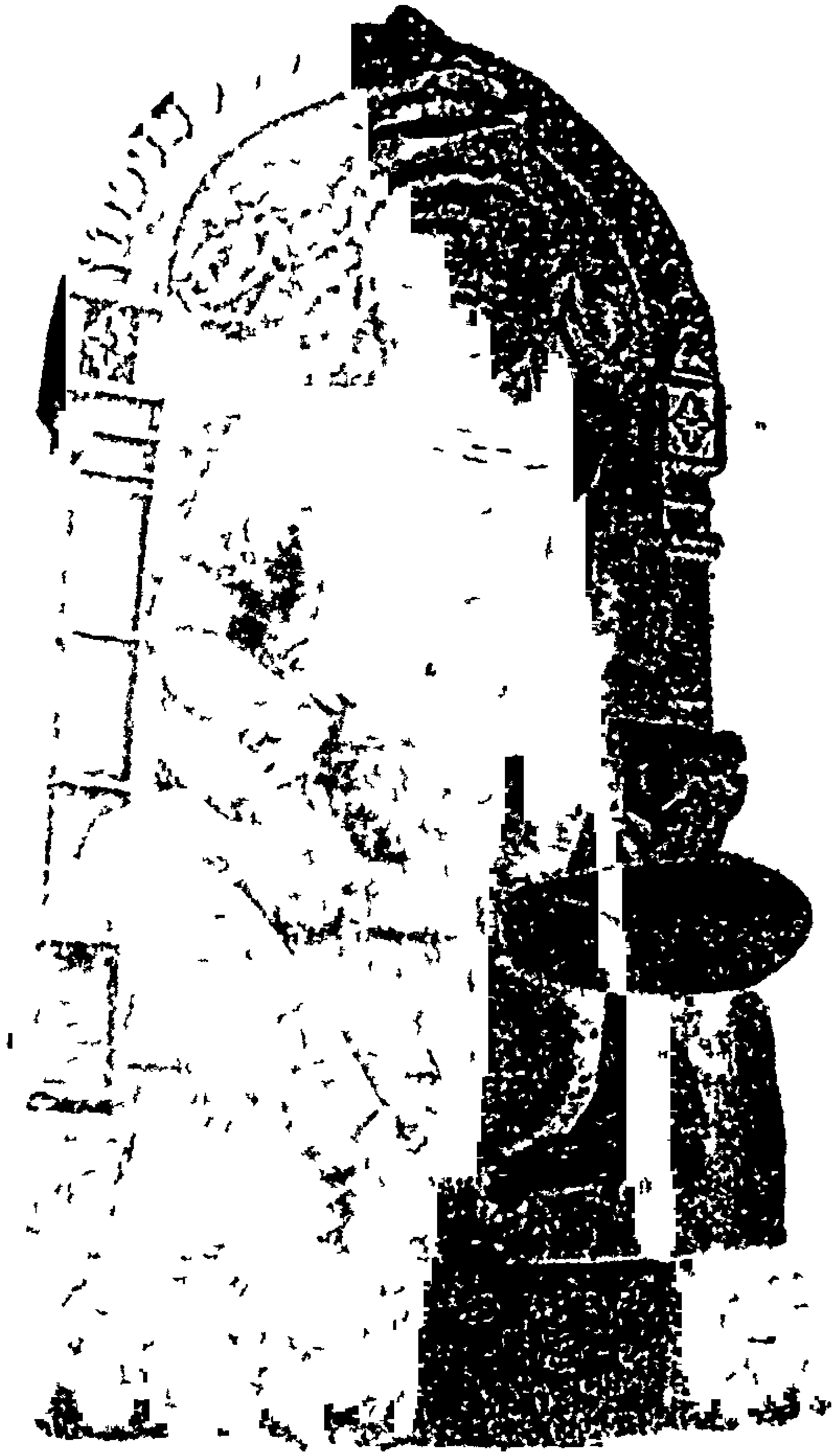
13 Kubera, Sidhpur
Circa 10th century A D,

PLATE IX

14 Kubera, Gunja

Circa 11th century A D

(Courtesy, Department of Archæology, Gujarat State)

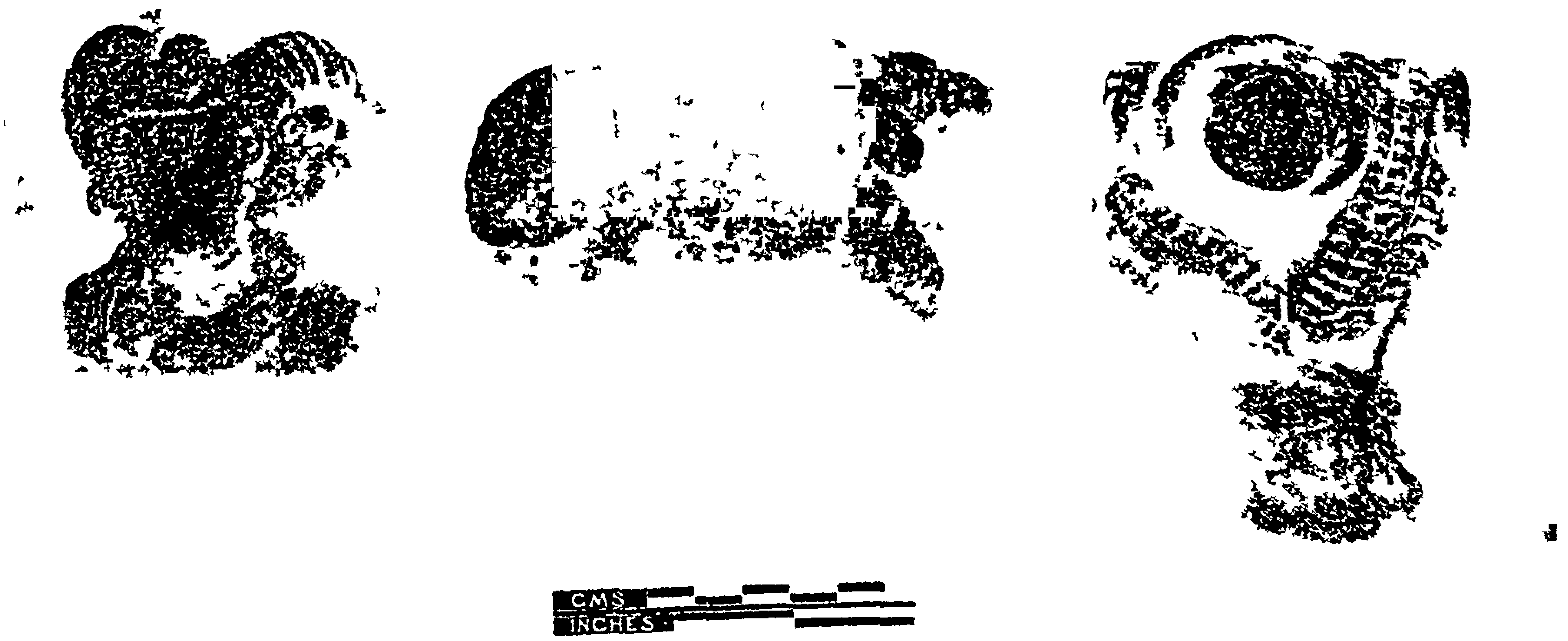


15 Kubera, Asoda

Circa early 12th century A D

(Courtesy, Dr H R Gaudani, Ahmedabad)

16 Buxar Terracottas



17 Buxar Terracottas

18 Buxar Terracottas

PLATE XII

19 Lady playing on Vina
Kushana Period Mathura

20 Musician playing on Vina
Pitalkhora Early Satvahana.

21 Lady playing on a stringed instrument
Duladeo Temple Khajuraho
11th century A D

22 Lady playing on the Vīna, Rupar Terracotta
Gupta, 4th—6th century A D
(Courtesy A S I)

PLATE XIV

23 Dance Scene from Pitalkhora Cave VII
(Courtesy A. S I.)

gures It is to be noted that these female terracottas are entirely different from those that are commonly associated with the Mauryan and Śunga periods The plates show that the Buxar terracottas have peculiar head-dresses, three of them have something like a crown on the head The variety, even in the six examples recorded, is really astounding Not one agrees with the other fully The ornaments worn by these figures are not of the heavy type Among the animal figurines, the head of an ass and the torso of a lion (?) have been beautifully modelled The lion's manes have been arranged in order Do they give us some premonition of the sophisticated lion manes of the Asokan period? Have these terracotta some religious significance? The human-shaped ass-head[1] points to this

Thus this short report on the terracottas of Buxar of Pre-NBP and NBP levels gives very valuable information, and the suggestions has have been made to provoke more scholarly discussions over and search for the terracottas in pre-Mauryan and Mauryan period—a subject not studied in detail so far It may also be pointed out that more such materials might help us in tracing the history of the art of terracottas from the Indus Valley period to the Mauryan period These terracottas actually fill up the gap to some extent

[1] "The human-shaped ass-head' referred to above, and to judge from the illustration, is in reality a figure representing Naigamesi Similar figurines have been recovered from the excavations at Ahichchhatra and no doubt have a cult significance See Ancient India, No 4, Type, 13 pp 134—137 *Editor*

Śiva carries a musical instrument, the *veenā* He figures in Ellora among the *saptamātrikās* in Cave No 21

It is interesting to observe that Śiva does not carry the *damaru* or the conch in all his forms In the *sāmanya* (ordinary), *kevala* (mere), *viśesha* (extraordinary), *anugraha* (compassionate) or his *kalyānasundra murtis* or images, other objects are associated with him It is when he assumes the form of a dancer, dancing the *tāndava*, the *katisama* or the *lalitam* that he flourishes the *damaru* In his aggressive forms like Bhairava, Virabhadra, Tripurāntaka, the *damaru* is inseparable That the drum had preceded other musical instruments seems to be clear When Śiva is in deep meditation as the Mahāyogi, other musicians play with all their vigour around him (see Cave No 16 'Śiva as Mahāyogi')

The goddesses, Lakshmi and Saraswati, wives of Vishnu and Śiva are associated with musical instruments, the conch and the *bīnā* or *veenā* When Pārvati assumes the form of Durgā or *mahishāsuramardini*, she has the privilege of holding the *damaru* of her consort, while as Gauri, Himavanti, Vaishnavi, Vārāhi, Goddess Pārvati is also privileged to have the conch

Caves No 14 Lankeshwara or *Rāvana-ki-khai* and No 16, Kailāsa, with its *rangamahāl* (theatre), No 29, *Sita-ki-nahani* and No 21 Rameshwara are superb examples where Śiva and Pārvati reign supreme, and life in all its aspects is depicted faithfully The *kanyādāna* of Pārvati, or the *Kalyāna sundara murti* panel of Śiva, is a unique panel where Hindu culture and tradition are represented at their best The entire panel represents the story of Pārvati's penance, the rescue of Śiva by her, Śiva asking for her hand of her father and finally the wedlock The grandeur of the scene of marriage, with presentations of caskets, flowers, sweets, jewellery, etc , and the *kanyādāna* by the father pouring water on the hands of the couple to the blare of trumpets, flutes, cymbals and drums is remarkable The entrance to Rameshwara is decorated with *toranas* of fruit and foliage, and brackets of women emerging from lotuses decorate the pillars

While the caves of Ajanta depicting the glorious age of the Buddha with its numerous jātaka stories are rich in lore and indicate in many scenes the various musical instruments in use, the Buddhist caves of Ellora have not much to speak of in the matter of musical instruments *Viśvakarma*, or Cave No 10, a significant Chaitya Cave, beautiful in its architecture and imposing in its character, with its stone beamed dome, its music gallery and revelling dwarfs in the friezes does not display musical instruments as such The caves nearer to *Kailāsa* and contemporaneous with it, however, have some musical instruments Caves Nos 11 and 12 especially convey the impression that the sculptors of Kailāsa and of these caves were either vying with each other or were common, since Pallava influence had permeated the atmosphere Here one sees in a Buddhist cave, a panel of Mahishāsuramardini, with the *damaru*, flying figures, half-bird and half-human, playing on flutes and other musical instruments

The Jain caves, dated between the 9th and 11th centuries A D , profuse in decoration and paraphernalia, are rich in musicians In *Chota Kailāsa*, the first Tirthankara, who is seated on a *padmāsana*, is surrounded by Chakreshwari, Yakshini of the first Tirthankara and Gandharvas Here we see the *mridanga*, the *jhānjha* and other instruments being played The Aurangabad caves of the same period have some beautiful specimens of sculpture, where again a female orchestra is seen with the *mridanga*, cymbals and flutes figuring prominently

Reverting to Ajanta after a general survey of the musical instruments in the Ellora sculptures, what strikes one forcibly is the fact that the orchestras were usually by women and sometimes by dwarfs It is in Cave No 4, 'Litany of Avalokiteshwara', that one encounters male musicians and also in one or two other places Otherwise, it is women, *apsarās*, *gandharvas* and dwarfs that are privileged to be musicians

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In Cave No 1 in the *Mahājanaka Jātaka*, which depicts a dancer, we find an orchestra of women Two drums are prominent in the picture, while others playing flutes and cymbals are also to be seen In Cave No 2 in the *Vidhurapandita Jātaka*, where Purnaka is riding a horse, we come across two musicians playing the flute and beating the drum In the story of Visvantara in Cave No 17 there are dwarfs with musical instruments When Indra flies down from his celestial abode to test Visvantara, a beautiful picture of an *apsarā* playing on the flute is to be seen The most interesting fresco depicts a scene in a house showing Buddha's childhood There are three boys busy learning and an instrument, the *veenā*, somewhat like a guitar is seen hanging on the wall in the background

The *veenā* originating, it is believed, from *vāna* or *bāna*, a bow, as a stringed instrument, is supposed to be the earliest of such instruments From the bow instrument it was only a step towards the gourd instruments with a finished rod and several chords or strings The *veenā* and the *venu* in India date back to the period of the Vedas and the epics *Veenās* of several types and sizes, with a variation in the number of strings, are to be seen in "Ajanta, Bhārhut, Sānchi and Amarāvati, Bhuvaneswara, Nāgārjunakonda, Mahābalipuram, Chidambaram, in different parts of Bengal in bas-reliefs and terracottas, most of which are of the harp type"

Excavations in Rupar (Punjab) have revealed a *veenā* of four strings (Plate XIII), dated 400 A D to 600 A D, while the *veenās* appearing in the Ajanta frescoes are dated between the 2nd century B C and the 7th century A D The coins of the period of Samudragupta, dated the 4th century A D, have the *veenā* represented on them and the terracottas of the Sunga and Kushana periods are similar to the style of the Samudragupta coins Swami Pradñyananda is of the view that the sculptural representations of the Gāndhāra and some of the Amarāvati types of *Veenās* (first-second century A D) look somewhat different from their counterparts of Ajanta and Bharhut They resemble the modern *sarod* with three or four strings The use of this type of ancient *veenās* (*svara-veenās*) were also prevalent in Nagarjunakonda The Swamiji further says that in Mahābalipuram, in Bengal and in the Chidambaram temple a *veenā* with two gourds is to be seen

The flute and the conch are associated with Krishna and Vishnu, though Brahmā and Śiva also have the privilege of using the conch on occasions Further the conch is associated with Vishnu as Trivikrama or as Narasimha The conch and the flute (*venu*) must have been the earliest wind instruments Both seem to have been used as drones until stringed drones came into use

Drums, as mentioned earlier, are of several types and with as many as five facets, *panchamukhavādyam* The temples of Southern India have various types of drums in existence Besides, there are several temples, both Hindu and Jaina, which have musical pillars Mention may be made of the Azhvartirunagar temple in Tiruvannamalai and the thousand-pillared Jain temple of Mudabidri A *shahnāi* type of stone instrument is another interesting object in the former temple

The basic instruments for rhythm, melody, drones and musical notes have been in existence in India from the remote past Sculpture, which is one kind of evidence, is rich in this respect The *veenā*, especially, is seen as a well-developed instrument with a varied number of strings, both as a harp type and as a guitar type in the *Gāndhāra* sculptures It is akin to the *saroda* type in the Nagarjunakonda and Amarāvati sculptures and in the present day *veenā* form with one or two gourds, it is to be seen in the sculptures of Rangpur, Bagali-Kaleśwara (Bengal), Mahābalipuram and in the frescoes at Ajanta

The caves that have recently come into the limelight in the Aurangabad District, namely, those of Pitalkhora, have revealed a number of beautiful sculptures These have been assigned a period contemporaneous with that of the Ajanta caves, viz, the second century B C to seventh century A D They are Buddhist caves and are cut into the

rocks of the Sātamāla Range, 42 miles from Aurangabad In course of time, these caves promise to assume importance with the introduction of accessible roads and other amenities The sculptures here, as in the other sculptures around, are associated with the Sātavāhana and Vākātaka regimes as well as the Buddhist sections of Hinayāna and Mahāyāna The architectural and sculptural glory of the rock-cut temples of the Deccan is also apparent in these caves

In these sculptures, three panels are to be seen Even though the sculptures have been damaged, it is possible to see clearly in Cave No 4 a woman engrossed in playing on a seven-stringed instrument with a plectrum (Pl XII 20) Another young man in the same cave is sporting a guitar type of seven-stringed instrument It has been built with the help of a gourd and has a curved handle on top Yet another hefty young man is seen holding the plectrum, while only the seven strings of the instrument are left intact without its frame This, as well as the first instrument played by the woman, seem to be of the harp type

The musical instruments that were popular in ancient India, as they appear in sculpture, come under five classified categories of instruments They are the *tāta* or stringed instruments which are played with the fingers or plectra This sound came under the reverberating category The second type of instrument was the *vitāta* variety This was played with a bow, and these instruments, at least some of them, approached the human voice *Anabadhva* was the third type of instrument coming under the category of percussion instruments where hands or sticks were used for playing and the instrument was covered with tanned skin The sounds from such instruments were resonant sounds The fourth category was the *ghana* where sound was produced by the impact of metallic bodies and, finally, there were the instruments of the *sushira* variety which were wind instruments

We find in the orchestral scenes nearly all of these instruments the flutes, *veenās*, cymbals, drums, etc (Plate XIV) The different sounds made up a complete harmonious composition To add to these sounds was the tinkle of the *ghungur* (anklet-bells), the sound of which also had to synchronise with the accompaniments, which was considered a skill in itself in the classical forms of dancing

Further, according to the *Sangeeta Ratnākara*, different instruments had their own uses For example, there were the *śushka* instruments or those used by solo-players, *gitānuga*, those which would accompany singers, *nrityānuga*, those which were used for dance recitals and lastly those called *gita-nrityānuga* suitable as accompaniments for both songs and dances Opinion is divided as to which instruments came first, whether they were the wind instruments or the stringed instruments The literature pertaining to music lists a number of instruments, especially in the category of the *veenā*, and nearly all the later great works like the Upanishads, the Puranas and the Sanskrit dramas contain detailed references to musical instruments The *veenā*, particularly, even in the olden times, had acquired such sanctity that Yājñyavalkya, one of the foremost of ancient lawgivers says 'He who knows the art of *veenā* playing and *śruti śāstra* can attain God easily'

Source Books

1 *Historical Development of Indian Music* By Swami Pradñyanananda

2 *Ajanta and Ellora* By R S. Gupte and B D Mahajan

3 *Laya Vadyas* By P Sambamoorthy

4 *The Story of Indian Music* By O Goswami.

5 *The rock-cut caves of Pitalkhora in the Deccan Ancient India No 15 (1959)* By M N Deshpande

A Note on Soma or Somaskanda

By

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THE cult of Skanda, particularly known as Muruga, to the Tamils is very common in South India to-day and a hoary pre-Aryan antiquity is claimed for it by many writers Recently I happened to examine the question how far this claim is valid in a paper on "Muruga", I read before the Archæological Society of South India In this short paper I propose to invite attention to an aspect of Skanda which seems to lend further support to the idea of the Aryan origin of the cult which I put forward in the paper just mentioned though it also brings it, especially in its later developments, into the inner fold of Śaivism proper

I refer to the aspect of Śiva described in relatively recent parlance as Somāskanda and resolved into *Sa* (with), *umā* (the goddess), and Skanda, *i e*, Śiva together with his wife Umā and son Skanda It is somewhat surprising that both in Gopinatha Rao's *Hindu Iconography* and in J N Banerjea's *Development of Hindu Iconography* only very late mediæval bronzes of this group are mentioned and discussed, and there is no reference to the excellent stone relief panels that adorn the back walls in the *garbhagrihas* of almost all Pallava temples of Śiva, rock-cut or structural, of the seventh and eighth centuries A D, in fact any one who visits these temples and examines the disposition of sculptures in the sanctum carefully, will not fail to recognize that the *somāskanda* panels were the principal objects of worship in these temples to start with, and that the linga and yoni placed in front of the panels, sometimes obscuring their view, are undoubtedly later intrusions Though the matter needs confirmation by further study, one is tempted to suppose that this standardized worship of the family of Śiva (father, mother and child) came up in relation to the great Śaiva revival of the Pallava times associated with the Nāyanārs And this appears to have been a peculiarly South Indian development

The form Somāskanda, with the long *ā* in the middle, explained as above occurs only in the late Śaiva *tantras* dating from the eighth or ninth century A D, though the sculptured form of the combination occurs earlier from the seventh century in Pallava temples But the legends of the origin and achievements of Skanda hark back to much earlier times and date at least from the later Vedic period, the mythology of *Soma*, the first member of the compound word, we are considering goes back at least to the Rig Veda if not to the earlier Indo-Iranian and even the Indo-European periods

Soma in the Rig Veda is primarily the plant used in the sacrifice and also its juice, the beverage offered to Indra and also consumed by

the officiating priests The *rasa* (juice) is often equated to *amrita* (nectar, drink of immortality) *Soma* is also *Indu*, a god differentiated at times from *Soma*, also a divinity whose praises are sung at length, 'though the constant presence of the plant and its juice set limits', as Macdonell (*Vedic Mythology*, p 104) points out, 'to the imagination of the poets who describe its personification' *Soma* is pressed by the stone, flows through the wooden strainer into the wooden vats (*grahas*) in which it is finally offered on a litter of grass to the gods as a beverage, sometimes in fire, or drunk by the priests 'The processes to which it is subjected are overlaid with the most varied and chaotic imagery and with mystical fancies often incapable of certain interpretation' The *Soma* plant is said to have come from heaven and to have been brought by the eagle *Soma* is decked with beauty and richly adorned *Soma* is called the embryo of the waters or their child, for seven sisters as mothers are around the child, the newly born, the Gandharva of the waters, and the waters are directly called his mothers *Soma* is impregnator (*retodhā*) an epithet specially applied to the moon *Soma* is also Vritrahan, like Indra His dwelling is on the mountains (*giriprstha*) 'When *Soma* is called a child (*sisu*) simply or a youth (*Yuvan*) this is doubtless an allusion to the fact that, like Agni, he is continually produced anew'

In the seventh Chapter of the Chhāndogya Upanisad which contains Sanatkumarāa's teachings to Nārada, the teacher Sanatkumāra is identified with Skanda, and the teaching in the chapter is the road to immortality (*amrita*)

The reader will notice that many of the traits of *Soma* are more or less the same as those we are familiar with in the later mythology of the Skanda-Kumāra-Kārttikeya-Muruga complex, we may note particularly the qualities of youth, beauty, dwelling on mountains, and that of spurting or flowing when pressed (*Skandana*) which may suggest the name *Skanda*, a point which becomes clear in the narrative in the *Vanaparva* of the *Mahābhāratà* of the birth of Skanda of which the salient features will be presently noticed Notice also the association of *Soma* with immortality (*amrita*) and Garuda, again features which recur in the Mahābhārata narrative as we shall see Then comes the identification of Skanda with Sanatkumāra in the Chhāndogya, which seems to suggest that Kumāra as the name of Kārttikeya may well be the shortened form of the sage's name, and this perhaps starts the association of Skanda with philosophical wisdom and his role as a great teacher, even of his father Śiva, which earns for him the praise of Arunagirinātha as *Jñānapanditasāmi*, and more generally as *Svāminātha* It is of interest to note in this connection that Mr K R Venkatarama Aiyar has mentioned the existence of sculptures in which Kumāra is represented as bearing in his hands the symbols appropriate to the form of Śiva as a great teacher, Daksināmurti, the symbols being the rosary and a jar of nectar, the latter perhaps a physical symbolization or the philosophical concept of immortality—*mrtyor mā amrtam gamaya* *

In fact the legend of the drink of immortality seems to go back much earlier than the Vedic period, to Indo-Iranian period and even to still earlier Indo-European times This will become clear from the following citations from the *Vedic Mythology* of Macdonell (pp 113-4 end of section 37) It is undoubted that *Soma*, the Avestan *Haoma*, was already prepared and celebrated in the Indo-Iranian period In the *RV* Soma is described as growing on the mountains or a particular mountain, in the Avesta it is said to grow on a certain mountain In the *RV* Varuna places it on the rock, in the Avesta it is placed on the great mountain Haraiti by a skilful god In the *RV* it is brought by an eagle, in the Avesta it is distributed from its native mountain by certain auspicious birds In both it is King of plants In both it is a medicine which gives health, long life, and removes death The pressing and offering of *Soma* was already an important

*Mr K R V Aiyar says this in article No 21 in the IV Volume of the *Cultural Heritage of India* (Ramakrishna Mission) But some knowledgeable scholars whom I consulted doubt the accuracy of this description of the sculpture or sculptures concerned and think that it may be a misreading of some other emblem, particularly the Cock which is held in all kinds of positions in the Skanda sculptures

feature of Indo-Iranian worship Both (*Soma and Haoma*) remove the machinations of the wicked, bestow victory over foes, and confer the celestial world Both grant steeds and excellent children" The belief in an intoxicating divine beverage, the home of which was heaven, may be Indo-European If so, it must have been regarded as a kind of honey-mead (Sanskrit *madhu*) brought down to earth from its guardian demon by an eagle (the *Soma*-bringing eagle of Indra agreeing with the nectar-bringing eagle of Zeus and with the eagle which, as a metamorphisis of Odhin, carried off the mead) The *madhu* or honey-mead, if Indo-European, was replaced in the Indo-Iranian period by *Soma*, but may have survived into the Vedic period by amalgamating with *Soma*

We may now consider briefly the epic accounts of the birth of Kumāra or Skanda, 'Kumāra Sambhava' as the Rāmāyana puts it We may leave the Purānas alone as they only elaborate and embellish the epic accounts without adding much that is new We may start with R G Bhandarkar's summary of the epic accounts "The general belief is that he was the son of Śiva and Pārvati But in the Rāmāyana he is represented as the son of the god of fire and Gangā (I, Chap 37) The foetus was thrown by Gangā on the Himavat Mountain, and it was nourished by the six stars constituting the constellation of Krittikā (Pleiades) and was thus called the son of Krittikās or Kārttikeya In the *MBH* (Vanaparva, Ch 229) also he is represented as the son of Fire, but the mother was Agni's true wife Svāhā, who had assumed the forms of the wives of six Rsis, whom Agni loved But here he is called the son of Śiva also as Agni is a form of that God (*Vaisnavism*, etc, p 150) There are verses in the Mahābhārata account which say that Śiva and Agni came together, and Pārvati entered Svāhā, Agni's wife, to give birth to the new war-leader of the divine hosts, for instance Brahmā tells Skanda

> Rudrenāgnim samāvisya svāhamāvisya co mayā
> hitārtham sarva lokānām jātastvamaparājitah (231 9)

And the Krittikās are also similarly accounted for by an astronomical or astrological Myth relating to the disappearance of Abhijit from the midst of the stars and the Krittikās taking their place (Ch 230) But there are some other features in the *MBH* account which call for particular notice from the point of view of this paper *First*, the moon (*Soma*) is brought into definite relation with the time of Skanda's birth Indra sees the moon entering the Sun at a fierce moment (*raudra muhūrta*) on an *amāvāsya* day when the sky is overcast with ruddy clouds, portents of a great war between gods and anti-gods and of the birth of the leader of the divine hosts in the war The text describing Indra's vision reads

> Somam caiva mahābhāgam viśamānam divākaram
> amāvāsyām pravrttāyām muhūrte raudra eva tu
> devāsuram ca sangrāmam sopasyadudaye ravau
> lohitaiśca ghanairyuktam pūrvam sandhyām satakratuh (224 11-13)

Further on in the same account we read

> Somasya Vahni Sūryābhyām adbhuto'yam samāgamah
> *janayet yam sutam somah* so'syā devyāh patirbhavet
> agniscaitaii gunairyuktah sarvairagnisca devatā
> esa cejjanayed-garbham so'syh devyāh patirbhavet
> evam samcintya bhagavām brahmalokam tadā gatah
> grhitvā Devasenām tām avadat sa pitāmaham
> uvāca cāsyā devyās-*sādhusuiam patim-diśa* (224 19-22)

This is a crucial context Indra, having rescued Devasenā from Kesi, is on the look-out for a suitable husband for her This is a metaphor which conveys also the idea that the divine hosts having been defeated by the *asuras*, the chief of the gods, Indra, is on the lookout for a capable commander-in-chief (*pati*) who would

reverse their misfortune and secure victory. This becomes patent when we recall that Devasenā (divine army) has a sister Daityasenā (the anti-god army) who loves Keśi (*asura* enemy of gods) while Devasenā does not like him, when she was forcibly carried off by Keśi, she cried for help, and Indra came to her rescue Note further that the future husband of Devasenā is to be generated by *Soma* in collaboration with Agni and Surya

The *second* element in the story is that Skanda is born not in the regular way from a mother's womb, but the father's semen spurts out and the mother collects it and disposes of it in some manner which leads to the birth and growth of the child In the Rāmāyana it is Śiva and Gangā, in the *MBH* it is Agni and Svāhā, assuming the forms of six Rsis's wives Again, as if to impress this fact in our minds, we are expressly told

> satkrtvāstat tu niksiptam Agne retah kurūttama
>
> tasmin kunde pratipadi kāminyā svāhayā tadā
>
> *tat skannam tejasā tatra samvrtam janayat* sutam
>
> rsibhih pūjitam skannam anayat Skandatām tatah
>
> satśira dviguṇaśrotro dvādaśākṣibhuja kramah
>
> ekagrivaikajatharah Kumarāh samapadyata (225 15-18)

Who can determine whether this story was already current when Sanatkumāra was designated Skanda in the Chhāndogya Upanisad or was a later invention of a euphemeristic nature to account for the name? Or again whether the story contains an element of pre-Aryan folk belief, tale, or legend? *But from our point* of view the main fact is the establishment of the name Skanda and the basis given to it

The *third* feature calling for notice is the fact that Svāhā turns herself into a *garudi* (female hawk) to be able to carry Agni's seed unnoticed by others from the place of their meeting in the forest

> acintayam-mamedan ye rūpam draksyanti kānane te brahmaninam anrtam dosam vaksyanti pāvaka
>
> tasmād etad raksyamānā Garudi sambhavāmyaham
>
> vananniragamanam caiva sukham mama bhavisyati
>
> Suparni sā tadā bhūtvā nirjagāma mahāvanāt (225 8-10)

The seed of Agni, like the *amrta*, is brought to the place of its fruition and practical use by a Garuda-suparna class of being This definitely links up the whole story with the Vedic mythology of *Soma*, *amrita* and so on

Considering all the facts, it is not by any means far-fetched to suggest that we had originally the concept of Somaskanda with the short *a* in the centre Sanskrit is a flexible language, and the compound word may be taken to mean many things that imply some connection between Skanda and Soma, whether the latter word is taken to stand for the sacrificial plant or the moon, or even the moon in conjuction with sun and fire as stated in the extracts from the *MBH* given above under the first of our three points, particularly *224 19*. The form Somāskanda with the long *ā* does not come into vogue till very late times, till after the *tantras* were composed in the ninth or tenth century A D if not later The Pallava temples are the earliest monuments to carry the sculptural panels in their *garbhagrha* depicting Śiva seated with Umā with Skanda dancing between them or seated (sometimes on Umā's lap), but while several of their Sanskrit inscriptions evince clear knowledge of the birth of Kumāra from Śiva with which they compare the birth of some of the kings in the line, they do not describe the panel itself anywhere, much less use the term Somāskanda It may also be noted finally that neither of the two forms we have discussed seems to be known to the Lexicons But the *Uttara Kāmikāgama* in its 47th Patala contains the statement 'Vaksyāmi somaskanda sukheśa-sthāpanam param' This not very elegant line has its own value as indicating that the connection of Soma with Skanda was quite a live tradition till a relatively late period

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Prabhāvatiguptā's Marriage

By

S V Sohoni

There are three main suggestions in this essay —

(1) There is adequate material to conclude that Rājā Mānānka Rāshtrakuta, of Mānapura in Central Maharashtra, had invaded Ashmaka and Vidarbha some time between 375 and 395 A D, and that his son (Devarāja) and grandson Avidheya (who granted the Pāndurangapalli copper plate)[1] and great-grandson Abhimanyu (who granted the Undikavātikā copper plate)[2] had retained their hold on at least a portion of this territory for another 80 years The wedge in the Vākātaka territory, thus driven, brought the Rāshtrākuta power into contact with the Gupta frontier, north of the Narmada

(2) That the Gupta-Vākātaka matrimonial alliance whereby Rudrasena II Vākātaka was married to Prabhāvatiguptā, daughter of Chandragupta II Sāhasānka, was a measure which resulted in *mutual gain*

(3) The mission of Kālidāsa to the court of Kuntaleshwara had the background of Rāshtrakuta aggression on Vākātaka territory, judged in the light of the fact that Vākātaka territory was controlled by two branches of the dynasty, under two separate administrations, whose interests clashed occasionally

The Gupta imperial diplomacy mainly concerned itself with safeguarding its southern frontier, south of Malwa, and the position of the son-in-law, i e, of the eastern kingdom, which had its capital at Nandivardhana The western kingdom with its capital at Vatsagulma, was much more menaced by the Rāshtrakuta aggression than the eastern

This position gives the background of the occurrence of at least two references to the punishment of the Kuntala power in the records of the western kingdom, and the marriage of Prabhāvatiguptā's grandson, Narendrasena of Nandivardhana, with a Kuntala princess

That the two branches of Vākātaka dynasty did not present a united front and occasionally quarrelled among themselves, is also proved by the fact that Harishena (A D 475—500) made some conquests to the east, obviously, after traversing the legitimate spheres of influence of the rival branch represented by Narendrasena and Prithvisena II

2 As regards the encroachment on Vākātaka territory by Mānānka and his son Devarāja, the relevant materials are furnished by Undikavātikā grant of Abhimanyu, a great-grandson of Mānānka The dynasty's rule as indicated by this grant, had, clearly, lasted for nearly one hundred years The record mentions that Mānānka, the founder of the dynasty, had conquered Vidarbha and Ashmaka, apparently, at the cost of the Vākātakas of both the branches

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1 Mysore Archaelogical Survey Report—1929

2 (*a*) Indian Antiquary, 1901, pp 509—518
(*b*) Epigraphia Indioa, VII, pp 163—165
(*c*) B O R I J XXV, pp 36—50

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The record yields the information that a small village (Grāmaka) Undikavātikā, was donated, and that this village was near (Petha) Pangaraka The identification of these two localities was first attempted in Pandit Bhagwanlal Indraji's article dealing with this record Fleet was not too sure as to who exactly had suggested that Pangaraka was Pagāra, a well-known locality near Pachmarhi, a seat of an old aboriginal family He identified Undikavātikā as Oontiā, a village six miles away from Pagāra, maintaining that the identification of the latter with Pangarka was correct Fleet was materially influenced in supporting the identification of Pangaraka with Pagāra, by the fact that in the Pachmarhi locality, there is a very ancient Mahādeva Shrine known as Jatāshankara, and he was particularly impressed by two details in this regard, *viz*, that this donation of a village was intended to benefit Dakshina Shiva and Jatābhāra, and the unusual name "Pangaraka", being easily identified as Pagāra

There was agreement between opinions of Bhagwanlal Indraji, Fleet and Hultzsch about Pangaraka being Pagāra, near Pachmarhi But on the other point, taking a view different from Fleet, Hultzsch thought that Bhagwanlal Indraji was right in holding that Jatābhāra was unconnected with Dakshina Shiva, that Dakshina Shiva was a shrine, and that Jatābhāra was a wandering monk, since he was described as, "Jatābhāra-Pravra(ji)tasya", and the latter portion of this compound word was regarded as conveying an equivalent sense of the term "Parivrājaka" In my opinion, this interpretation contributed to confusion "Dakshinashivasya" and "Jatābhāra Pravra (?) tasya" could more reasonably be understood to mean, "of Dakshina Shiva" or "of the Shiva to the South, who had extensive matted hairlocks," the word after "Jatābhāra", being "Pravardhitasyath", a confusion between the letters "vraji" and "vardhhi", being quite obvious

The result, especially after this modification, would be to confirm the identification of Pangaraka with Pagāra, near Pachmarhi, by giving the further information that "the Dakshina Shiva with extensive matted hairlocks" was a direct reference to the famous Shiva shrine in Pachmarhi, whose principal feature is the well-known rock formation there, resembling matted hair Fleet himself referred to the fact that this Shiva shrine was known as Jatāshankara Thus the donation of a small village was really and directly in favour of that famous shrine.

Against this identification of Pagāra, and of Dakshina Shiva, may be cited Mmp V. V Mirashi's view that these localities were in Central Maharashtra, not far away from the localities which were referred to in what is called Pāndurangapalli grant of Avidheya, an uncle of Abhimanyu, who issued the Undikavātikā grant I am, however, unable to discover any specific reason in Mmp V V Mirashi's argument that the localities mentioned in Abhimanyu's record should not be found in North Vidarbha or present-day Hoshangabad District Further, he has not found a satisfactory alternative identification of Pangaraka He has not adequately explained, "Dakshina Shivasya Jatābhāra pravra (?) tasya" What explanation is there for the fact that a Commander of Harivatsa-kotta had to witness this transaction? Fleet's suggestion that this fort occupied present-day Dhupgarh site, appears to be quite reasonable, "Harivatsa", involving a reference to the Sun

Thus, for nearly 100 years at least, there was Rashtrākuta hold over Hoshangabad District—and very probably, on a tract of land connecting this area with the principal possessions of this dynasty in Maharashtra, thereby introducing a wedge between the two Vākātaka kingdoms of Vatsagulma and Nandivardhana

3 This conclusion is of material help in understanding the major political forces immediately preceding Chandragupta II Sāhasānka's military operations against the Saka kings of Mālava and Saurāshtra Scholars have held that these operations had taken place *circa* 395 A D

Vincent Smith was the first to suggest that the Gupta Emperor had something to gain through a matrimonial alliance with the Vākātaka dynasty Alongside this suggestion, it must be appreciated that some decades prior to 395 A D, the Vākātaka dynasty had split

into at least two branches The Puranas maintain that there were four. The Gupta alliance was with one out of these two or four branches, *viz*, that branch which had its headquarters, in the relevant period, at Nandivardhana in Central Vidarbha

4 It is necessary to say a word about the location of Purikā which was, apparently, the earliest capital of the Vākātaka dynasty A careful reading of the relevant passage in Harivamsha,[3] leaves *no room for doubt that* this town was situated on the left bank of the

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3 Quoted by Mmp Mirashi, pp 16 and 30 of "Vākātaka Nripati āṇi tyānchā Kāla"

वैशम्पायन उवाच ॥ सतासु नागकन्यासु कालेन महता नृप ॥ जनयामास विक्रान्तान्पञ्च पुत्रान्कुलोद्वहान् ॥१॥ मुचकुन्द महावाहु पद्मवर्ण तथैव च ॥ माधव सारस चैव हरित चैव पार्थिवम् ॥२॥ एतान्पञ्च सुतान्राजा पञ्चभूतोपमान्भुवि ॥ ईक्षमाणो नृप प्रीति जगामातुल विक्रम ॥३॥ ॥६७॥ एतासु मम सुतासु ते तव पञ्च सुता उत्पत्स्यन्त इत्यन्वय ॥६८॥ अस्मत्समयवद्धा अस्मद्वरदानानुगृहिता ॥६९॥ ७०॥ ७१॥ ७२॥ स यदु ता पत्नी समाश्वास्य पितृगृहवियोद्दु खमपनीय ।७३॥ इति श्रीमहाभारते खिलेषु हरिवशे विष्णुपर्वणि टीकाया सप्तत्रिशोऽध्याय ॥३७॥ अष्टात्रिशे त्वध्याये नागकन्यासु पञ्चसु ॥ यदो पञ्चाभवन्पुत्रा माधवप्रमुखा नृपा ॥२॥ स तासु इति ॥१॥ २॥ ३॥

तेजिता प्रोत्साहिता ॥४॥ ५॥ ६॥ विन्ध्येति ॥ विन्ध्यस्योत्तरत ऋक्षवतो दक्षिणत इत्यर्थं ॥७॥ ८॥ तत्रैव सह्यस्योपरिष्टादेव परत पश्चिमाया दिशि ॥९॥ पन्नगराजस्य धूम्रवर्णाख्यस्य ॥१०॥ स्वपुर रैवताचलसमीपस्थम् ॥११॥ १२॥ मृगयन्तो जिज्ञासमाना ॥१३॥ दारुणोपल सकटे विषमाश्म दुर्गमे ॥१४॥ १५॥ ते प्राप्तवय-स्सर्वे स्थिता पञ्चययाऽद्वय ॥ तेजिता वलदर्पाभ्यामूचु पितरमग्रत ॥४॥ तात युक्तास्स्म वयसा वले महति सस्थिता ॥ क्षिप्र माज्ञप्तुमिच्छाम किं कुर्मस्तव शासनात् ॥५॥ स तान्नृपतिशार्दूलश्शार्दूलानिव वेगितान् ॥ प्रीत्या परमया प्राह सुतान्वीयकुतूहलात् ॥६॥ विन्ध्यर्क्षवन्तावभितो द्वे पुर्यो पर्वताश्रये ॥ निवेशयतु यत्नेनमुचकुन्दस्सुतो मम ॥७॥ सह्यस्य चोपरिष्टात्तु दक्षिणा दिशमाश्रित ॥ पद्मवर्णोऽपि मे पुत्रो निवेशयतु मा चिरम् ॥८॥ तत्रैव परत कान्ते देशे चम्पकभूषिते ॥ सारसो मे पुर रम्य निवेशयतु पुत्रक ॥९॥ हरितोऽय महावाहुस्सागरे हरितोदके ॥ द्वीप पन्नगराजस्य सुतो मे पालयिष्यति ॥१०॥ माधवो मे महावाहुर्ज्येष्ठ पुत्रश्च धर्मवित् ॥ यौवराज्येन सयुक्तस्स्वपुर पालयिष्यति ॥११॥ सर्वे नृपश्रिय प्राप्ता अभिषिक्तास्सचामरा ॥ पित्राऽनुशिष्टाश्चत्वारो लोकपालोपमा नृपा ॥१२॥ स्वस्व निवेशन सर्वे भेजिरे नृपसत्तमा ॥ पुरस्थानानि रम्याणि मृगयन्तो यथाक्रमम् ॥१३॥ मुचकुन्दश्च राजर्षिविन्ध्यमध्यमरोचयत् ॥ स्वस्थान नर्मदातीरे दारुणोपल सकटे ॥१४॥ स च त शोधयामास विविक्त च चकार ह ॥ सेतु चैव सम चक्रे परिखाश्चामितोदका ॥१५॥ स्थापयामास भागेषु देवतायतनान्यपि ॥ रथ्या वियीर्नृणा मार्गाश्चत्वराणि वनानिच ॥१६॥ सता पुरी धनवती पुरुहूतपुरीप्रभाम् ॥ नातिदीर्घेण कालेन चकार नृपसत्तम ॥१७॥ नाम चास्याश्शुभ चक्रे निर्मित स्वेन तेजसा ॥ तस्या पुर्या नृपश्रेष्ठो देवश्रेष्ठपराक्रम ॥१८॥ महाश्मसघातवती

ऋक्षवन्तमुपाश्रिता ॥ महिष्मती नाम पुरी प्रकाशमुपयास्यति ॥ १९ ॥ उभयोर्विन्ध्ययो पादे नगयोस्ता महापुरीम् ॥ मध्ये निवेशयामास श्रिया परमया वृताम् ॥ २० ॥ पुरिका नाम धर्मात्मा पुरी देवपुरीप्रभाम् ॥ उद्यानशतसवाधा समृद्धापणचत्वराम् ॥२१ ॥ ऋक्षवन्न सममितस्तीरे तत्र निरामये ॥ निर्मिता सा पुरी राज्ञा पुरिका नाम नामत ॥२२॥ स ते द्वे विपुले पुर्यौ देवभोग्योपमे शुभे ॥ पालयामास धर्मात्मा राजा धर्मे व्यवस्थित ॥ २३ ॥ पद्मवर्णोऽपि राजर्षिस्सह्यपृष्ठे पुरोत्तमम् ॥ चकार नद्या वेणायास्तीरे तरुलताकुले ॥२४॥ १६ ॥ १७ ॥ १८ ॥ महाश्मसघातवतीति माहिष्मतीपदस्यावयवार्थो दर्शित ॥ १९ ॥ २० ॥ २१ ॥ २२ ॥ राजा मुचकुन्द ॥ २३ ॥ २४ ॥ विषयस्येति ॥ भूभागस्याल्पत्वेपि अतिनिविडतया तत्रैव कृत्स्नस्य राष्ट्रस्य समावेश कृत्वा तस्यैव महान्त वप्र महाप्राकारोपम चकारेत्यर्थं ॥२५॥ प्राजापत्येन त्वष्टृसवन्धिना कर्मणा शिल्पेन ॥ २६ ॥ क्रौञ्चपुर वेणाया दक्षिणे भागे ॥ २७ ॥ २८ ॥ २९ ॥ दाशा धीवरा ॥ ३० ॥ सचिन्वन्ति राशीन् कुर्वन्ति युक्ता सावधाना जातरूप दीप्तिमत् ॥ ३१ ॥ प्रचिन्वन्तोऽन्वेषयन्त नौभि महानौकाभि सयानगामिन क्षुद्रनौकावलेनालोड्य एकत्र महानौकाया प्रक्षिपन्तीत्यर्थं ॥ ३२ ॥ विषयास्याल्पता ज्ञात्वा सपूर्णं राष्ट्रमेव च ॥ निवेशयामास नृपस्स वप्रप्रायमुत्तमम् ॥२५ ॥ पद्मावत जनपद करवीर च तत्पुरम् ॥ निर्मित पद्म वर्णेन प्राजापत्येन कर्मणा ॥ २६ ॥ सारसेनापि विहित रम्य क्रौञ्चपुर महत् ॥ चम्पकाशोकवहुल विपुल ताम्रमृत्तिकम् ॥ २७ ॥ वनावासीति विख्यात स्फीतो जनपदो महान् ॥ पुरस्य तस्य तु श्रीमान्द्रुमैस्सावर्तुकर्वृत ॥ २८ ॥ हरितोऽपि समुद्रस्य द्वीप समभिपालयत् ॥ रत्नसचयसपूर्णं नारीजनमनोहरम् ॥ २९ ॥ तस्य दाशा जले मग्ना मद्गुरा नाम विश्रुता ॥ ये हरन्ति सदा शङ्खान्समुद्रोदरचारिण ॥ ३० ॥ तस्यापरे दाश जना प्रवालाञ्चनसमवान् ॥ सचिन्वन्ति सदा युक्ता जातरूप च मौक्तिकम् ॥३१॥ जलजानि च रत्नानि निषादास्तस्य मानवा ॥ प्रचिन्वन्तोऽर्णवे युक्ता नौभिस्सयानगामिन ॥ ३२ ॥ मत्स्यमासेन ते सर्वे वर्तन्ते स्म सदा नरा ॥ गृह्णन्तस्सर्वरत्नानि रत्नद्वीपनिवासिन ॥ ३३ ॥ तैस्सयानगतैर्द्रव्यै र्वणिजो दूरगामिन ॥ हरित तर्पयन्त्येक यथैव धनद तथा ॥ ३४ ॥ एवमिक्ष्वाकुवशात्तु यदुवशो विनिस्सृत ॥ चतुर्द्धा यदुपुत्रैस्तु चतुर्भिर्भिद्यते पुन ॥ ३५ ॥ स यदुर्माधवे राज्य विसृज्य यदुपुङ्गवे ॥ त्रिविष्टप गतो राजा देह त्यक्त्वा महीतले ॥ ३६ ॥ बभूव माधवसुतस्सत्त्वतो नाम वीर्यवान् ॥ सत्त्ववृत्तिर्गुणोपेतो राजा राजगुणे स्थित ॥ ३७ ॥ सत्त्वतस्य सुतो राजा भीमो नाम महान भूत् ॥ येन भैमास्सुसवृत्तास्सत्वतात्सात्त्व तास्स्मृता ॥३८॥

Narmadā Other relevant sources establish that it was the headquarters of a tract adjoining and very probably to the south of the Dashārna region Not only was it on the left bank of the Narmadā, but not very far away from the Rikshyavanta mountain Vidishā was the capital of the Dashārna region Thus, the connexion between Dashārna with Vidishā to the north, on the right bank of the Narmadā, and Purikā, on the left bank to the south, is quite plain

According to Mmp Mirashi, the transfer of the capital from Purikā to Nandivardhana took place in the last decade of the 4th century, i e, between 390 and 400 A D It is not unlikely that Purikā was abandoned, and Nandivardhana selected by the eastern branch of the Vākātaka dynasty, on account of lack of security caused by aggression of the Rāshtrakuta forces, under Mānānka and his son Devarāja, who sought to exploit the disturbed conditions following the death of Samudragupta, the occupation of North-Western India by some foreign powers, and the feud that prevailed between Rāmagupta and Chandragupta II The invasion of the Purikā region by a ruler of Vidishā and *vice versa*, was a feature that continued down to the British period in Indian history.

5. If the Rāshtrakuta menace was a factor in the decisions of the Vatsagulma branch of the Vākātaka dynasty, it follows that the Rāshtrakuta forces could have given welcome assistance to the Saka kings of Lata, Saurāshtra, Ānarta, Avanti and Malavā, which were threatened by Chandragupta II, Sāhāsānka, and through a combined attack by Saka forces and the Rāshtrākuta armies, the position of the Vākātaka's ruling in Ashmaka would have been quite precarious The outright annexation of the Ashmaka region and a long strip of Vidarbha running north to south, not far away from it to the east, might have been achieved by the Rāshtrakutas under Mānānka and Devarāja, in such circumstances

The Saka thrust into Vidarbha territory is proved by the occasional find of hoards of Saka coins of this period, not all of which could be due to trade and commerce

6 From this analysis, it would follow that even the Vākātakas of Nandivardhana were in need of assistance from Chandragupta II, and that this basis of mutual help was the main consideration governing the marriage between Rudrasena Vākātaka and Prabhāvatiguptā, a daughter of Chandragupta II

The fact that her Gupta lineage was completely recorded in the charters issued by Prabhāvatiguptā, shows that the Vākātakas of Nandivardhana had, probably, to depend even more on the help from the North—presumably, following the continued aggression from the southern power, i e, the Rāshtrakutas of Mānapura, under Devarāja The reference to the Gupta dynasty in Prabhāvatiguptā's charters, was not unwelcome to the recipients of those charters, is indication of a source of additional guarantee

7 One feature of the Undikavātikā grant may be mentioned The comparison of fame with the flow of the Gangā river, which occurs in the Undikavātikā grant, is similar to that in the prashasti of Samudragupta Mānānka named his son Devaraja Was this after Devagupta, a name of Chandragupta II Sāhasānka, son of Samudragupta ?

8 The need for Gupta diplomacy to placate the Rāshtrakuta power under Mānānka and Devarāja, may be thus more clearly appreciated If it aimed at preventing aggression of the Rāshtrakutas on their own territory of Malawa, through the Vākātaka territories of the Nandivardhana branch, it was obvious that the Rāshtrakuta dynasty also wanted to avoid Vākātaka aggression on its own territories from Nandivardhana as well as Vatsagulma

9 It was in these circumstances, that a Rāshtrakuta king, either Mānānka himself, or his son, Devarāja, could afford initially to ignore the proper etiquette concerning an ambassador of a great North Indian power like the Gupta empire The skill of the diplomat forms the subject-matter of the drama, "Kuntaleshvara Dautya" The diplomat was, according to some stray ancient literary sources, no other than Kālidāsa himself, sent by his emperor Chandragupta II, to the king of

Kuntala. Apparently, Kālidāsa so shrewdly handled the problem of safeguarding the southern frontier that, ultimately, he could report to Chandragupta II that the Kuntaleshvara had left the conduct of affairs to him, and considered himself free as well as safe to pursue his pleasures uninterruptedly. This equilibrium could not have been brought about unless the power of all the concerned southern States could be adequately balanced, through the intervention of a third and much stronger power, *viz.*, the Gupta empire. These States were the main branches of the Vākātaka dynasty and the Rāshtrakutas of Mānapura.

10. The suggestion mainly based on Kshemendra[4] comment that the Rāshtrakuta king either Mānānka or Devarāja, accepted the suzerainty of the Gupta emperor seems to be unsupported by the meagre literary evidence on the point. "त्वयिविनिहितभार", does not mean that the king regarded himself as the vassal of the Gupta emperor. In fact, it means that only a transfer of anxieties took place. No Mahārājadhirāja, worth his salt, could have tolerated for a moment, a report of this kind concerning his vassal. All that happened was that a condition of stable balance of power was secured, whereby peace prevailed in the territories of the Vākātaka powers of Nandivardhana and Vatsagulma as well as of the Rāshtrakuta power, under the assurance conveyed by the Gupta authorities. The description, "Kuntalānām Adhishah", does not imply a feudatory status. The emphasis it contains on Kuntala territory, was due to the political consideration of not offending the Vidarbha rulers.

It seems unnecessary to assume that Kālidāsa was the *author* of the drama, besides being one of its important *dramatis personæ*. The scanty literary sources do not, strictly speaking, warrant such a conclusion. They quote a verse in the drama spoken by Kālidāsa but do not indicate that Kalidāsa was the author of the drama itself.[5]

11. An important point is what is the best guess about the decade in which this marriage took place between Rudrasen II and Prabhāvatiguptā?

Altekar has stated[6]—

(1) "The conquest of Kuntala had increased the prestige of the Vākātakas, and the Gupta emperor Chandragupta II, who was contemplating the overthrow of the Western Kshatrapas at this time, felt that it would facilitate his task if he could secure a helpful ally on his southern flank, while his armies were operating in Malwa and Gujarat. He, therefore, proposed a matrimonial alliance to Prithvishena by offering his daughter Prabhāvatiguptā in marriage to the Vākātaka crown prince, Rudrasena. The offer was accepted by Prithvishena and the marriage was celebrated with great pomp, probably, at Pātaliputra, in c. 380 A.D."

In a foot-note, it was added—"A literary tradition states that Pravarasena II, the

4. Eg. Kshemendra in Auchitya Vichāra Charchā, Kāvya Mālā, pp. 39-40.

5. *Vide* extracts from Kshemendra and Bhoja.

तद्यथा कालिदास । "किं कुन्तलेश्वर करोति" इति विक्रमादित्येन पृष्ट उक्तवान ।

असकलहसितत्वात्क्षालितानीव कान्त्या
मुकुलितनयनत्वाद्व्यक्त कर्णोत्पलानि ।
पिवति मधुसुगन्धीन्याननानि प्रियाणा
त्वयि विनिहितभार कुन्तलानामधीश ॥

Bhoja in शृंगारप्रकाश

'यथा कुतलेश्वरदौत्ये कालिदासस्य—'

इह निवसति मेरु शेखर क्ष्माधराणा
मिह विनिहितभारा सागरा सप्त चान्ये ।
इदमहिपतिभोगस्तम्भ विभ्राजमान
धरणितलमिहैव स्थानमस्मद्विधानम् ॥

अत्र महाराजदूते सामतास्थाने स्वप्रभुसमुचित गौरव पूजार्हमासनमनासाद्य कार्यवशेन भूमावेवोपविष्ट प्रागल्भ्य—गाभीर्येण एव ब्रूते यथास्मद्विधाना वसुधातल एव भुजगपतिभोगस्तभ प्राग्भार निष्कपे धरासने स्थान युक्त यस्मादिहैव मेरुरचल चक्रवर्ति समुपविष्ट सप्तमहाब्धयश्च तत्तुल्यतैवास्मकम्

—Kshemendra in औचित्यविचारचर्चा (काव्यमाला, प्रथम गुच्छ, pp. 139-140)

6. Majumdar and Altekar in NHIP, p. 110.

youngest son of this union, was spending his early youth in the pursuits of pleasure in c 410 A D, is his maternal grandfather Chandragupta II could be relied upon to look after his administration Cf "*Pibatu madhusuravadhu vāravānī priyavaram* Mayi vimuktabhīrah kuntalīnamadhulaih" At the time of the death of Chandragupta II in c 414 A D, his grandson would be about 25, his birth, therefore, may be placed in c 390 A D He was at least the second, if not the third or fourth child of his parents, and so their marriage may be placed in c 380 A D"

(2) "Prabhāvatiguptā seems to have lived for about 25 years in her son's reign and died at the ripe age of about 75"

It is clear that this was a purely conjectural analysis

12 The Gupta chronology is not precisely known in respect of several important details, including who exactly had founded the Gupta era, when exactly was Chandragupta II Sāhasānka born, when was his daughter Prabhāvatiguptā born, etc It would be useful to examine the basis of some current notions, and to find out whether there is any justification for entertaining them—

(1) The first of these concerns Chandragupta II It consists of an assumption that Chandragupta II was a young man when he seized power *from his elder brother*, Rāmagupta The only slight indication that Chandragupta was young when he performed his daring exploit of killing the Sakādhipati who had demanded the transfer of Dhruvasvāmini is furnished by the available extracts from the Devi Chandraguptam Rāmagupta was represented as telling Chandragupta, his younger brother, that he was too tender to undertake such an audacious step

But this does not mean that Chandragupta was between 20 and 25 years old or even younger, at that time In India, it is customary to address a younger brother as if he were very young, no matter what his age really is Further, Chandragupta then was a *Kumāra* and not a reigning king at that time, and his being called a Kumara was no pointer to his actual age

(2) The more satisfactory method of examining this question is to make a plausible assumption that Chandragupta was born sufficiently early during the reign of his father, Samudragupta Assuming that Samudragupta seized power in 325-330 A D and that his son Chandragupta II was born thereafter, it would not be unreasonable to assume that Chandragupta II was born before *circa* 340 A D Assuming further that Chandragupta II married Prabhāvatiguptā's mother well before 350 A D, as a part of a political settlement made by Samudragupta with a Nāga dynasty, of Central India, it would not be improbable that Prabhāvatiguptā was born within five years of this marriage, *i e* before 355 A D If this were not entirely improbable, one could assume that she was married to Rudrasena before she was fifteen years old, *i e*, by 370 A D or probably, between 5 and 10 years earlier Thus, this important event whereby one branch of the Vākāṭaka dynasty became associated with the Imperial Gupta dynasty, perhaps took place between 360 and 370 A D or say, 15 years, before 380 A D

13 Altekar has put the date of the death of Rudrasena II as c 390 A D, and observed that Prabhāvatiguptā, "was only about 25 at this time and had two sons, Divākarasena and Dāmodarasena, the former being about five years in age and the latter about two"

If Divākarasena were the eldest child of Prabhāvatiguptā, it would follow, according to the series of assumptions made above, that his birth was more likely to have taken place, some time between 365 and 370 A D.

Altekar has stated, "Divākarasena died soon after the 13th year of Prabhāvatiguptā's regency" When this regency commenced is also a matter of some speculation Altekar has given Rudrasena II a reign of five years and put his death in *circa* 390 A D It was

more likely to be 10 years earlier This, of course, is pure guess work—there being not the slightest indication anywhere as could throw light on what really happened

14 Pravarasena II is supposed to have ruled between c 410 and 440 A D Altekar has said that in c 430 A D Pravarasena married his crown prince, Narendrasena, to Ajitabhāttarikā, a princess of Kuntala

15 On this very approximate basis, the chronology of the principal events in Prabhāvatiguptā's career works out as follows —

(1) Birth, between 360 and 355 A D

(2) Marriage, between 365 and 370 A D

(3) Loss of husband, between 380 and 385 A D

(4) Loss of first son, in c 393—398 A D

(5) Marriage of her grandson Narendrasen with a Kuntala princess in c 430 A D, *i e*, when she herself was between 80 and 90 years of age

16 From these considerations, some important consequences follow The conquest of the Saka territories by Chandragupta II is, ordinarily, assumed to have taken place between 395 and 401 A D In that case, the Vākātaka Gupta matrimonial alliance, probably, preceded the actual military operations of Chandragupta II against his Saka enemies Alternatively, the decade of these operations has to be placed earlier than 390—400 A D How much earlier it could be, is matter of pure guess, the only meagre evidence being that furnished by the Gupta and Saka coinage The earliest dated silver pieces of Chandragupta II which could reasonably be assumed to be meant for circulation in the former Saka territories, are of the year 409 A D

17 The probable sequence seems to be this

(1) In the closing years of Samudragupta's reign there was increasing pressure from the north-western powers

(2) This pressure resulted, lateron, in an ignominious treaty being concluded by Samudragupta's son Rāmagupta, whereby he agreed to surrender his queen to the Saka king

(3) His brother, Chandragupta, killed the Saka king by disguising himself as that queen and going to the Saka camp along with a select body of men disguised as the queen's maidservants The ensuing slaughter of the Saka king and his military commanders, must have resulted in a gap in Saka political authority and in the rule of a new Saka king or kings in their own territory, after withdrawal from the scene of disaster Presumably, the new ruler or rulers had to agree to a subordinate status in the Gupta empire

(4) Thereafter, Rāmagupta reigned as the Gupta monarch *for several years* This is the testimony of the Arab historian, as already explained by me elsewhere.

(5) Chandragupta II grew older meanwhile, pretended to be mad and could kill Rāmagupta in his palace, while he and Dhruvaswāmini were chewing sugarcane This event probably took place in 379-380 A D It is not unlikely that prior to his murder, Rāmagupta was ruling for nearly ten years In other words, the Saka slaughter by Chandragupta could be not later than 370 A D

(6) This would indicate that Prabhāvatiguptā was married to Rudrasena II while her father was not a reigning Gupta monarch, and that the marriage was due to political considerations facing her uncle Rāmagupta It is not necessary to assume that the marriage took place after Chandragupta II ascended the throne

(7) It follows that the Saka aggression against Gupta territory could be between 365 and 370 A D The Saka king in this decade of 360—370 A D was Rudrasena III

18 It has to be seen whether there is a blank in the Saka coinage during this decade, as would explain the termination of one dynasty's rule and the rise of an altogether different Saka family This is precisely found to be the case The Kshatrapa king between

348 and 378 A D was Swāmi-Rudrasena III about whom Rapson observed[7]—" Both silver and lead coins appear during the reign of the Mks Swāmi-Rudrasena III, son of Swāmi-Rudraman II The silver coins, the dates of which range from 270 to 300, fall into two well-marked divisions, separated by an interval of thirteen years The dates of the earlier division represent each year from 270 to 273 inclusive (pp 179-80, Pl xvii, 812—817), those of the later division represent various years between 286 and 300 (pp 180—186, Pl xvii, 818—868)

" The coin-legends have generally at this period become so much debased that the individuality of some of the characters is almost lost It is, for example, often impossible to distinguish between the *akharas ha* and *na* as they are represented on the coins, and if it were not for the decisive evidence afforded by certain specimens on which this distinction is clearly seen (e g, *Pl xvii, 848-49,* and 853), it might have been doubted whether the name of this Mahakshatrapa should be read as 'Rudrasena' or 'Rudrasimha' On certain coins belonging to the later division, however (those with dates ranging from 286 to 300), the legend is more distinct and more carefully formed characters appear (e g, Pl xvii, 868), and we may probably recognise in these a conscious attempt to reform a coin-legend which threatened to become absolutely unintelligible unless the process of degeneration were arrested A similar attempt is observable also in a succeeding reign (Svami-Rudrasimha III, Pl xvii, 925-26), and it is quite possible that all these reformed coin-legends may belong to a different mint, since they continue to appear as exceptions to the general rule

" The period between the dates 273 and 286, which thus separates the earlier from the later coinage of Rudrasena III, was probably marked by some political disturbance during which the coinage ceased (cf the similar interval between the reigns of the Ks Yasodaman II and the Mks Swami-Rudradaman II, v sup 122) The Uparkot hoard here supplies some very striking evidence This hoard contained no specimens of the later coinage All the ninety coins of Rudrasena III which it comprised are dated in the years 270, 271, 272 or 273, and in regard to these, the Rev H R Scott, who made a careful analysis of the hoard, says, " many of these coins especially those of the last years, are in mint condition, fresh and unworn From these facts we may fairly conclude that the hoard was secreted at the end of the first period of Rudrasena's reign, and most probably it was because of the revolution which then took place, rendering life and property insecure, that the money was hidden

" To the period of the reign of Rudrasena III belong also certain lead coins of square form Their obv type is 'Humped bull r,' and on their rev they have the usual type of the Western Kshatrapas, 'Caitya, l. crescent, r star,' but with the addition of a date in the exergue (pp 187-88, Pl xvii, 889-90) Their dates range from 280 to 294, and they belong, therefore, chiefly but not entirely, to the period during which no silver coins are found (274—285) Their rev type would seem to connect them with the Western Kshatrapas, and their dates with the reign of Rudrasena III But it is not absolutely certain that they belong to this dynasty. Other coins prove that the type which is generally characteristic of the Western Kshatrapas, the 'Chitya' was used also by successful invaders of their dominions, e g, by Isvaradatta (Pl xiii, 472—79), by the Traikutaka Dynasty (Pl xviii, 930—78), and by the 'Bodhi' Dynasty (Pl xviii, 983—1000) We must, therefore, remain in some doubt whether these lead coins were struck by Rudrasena III or by a foreign invader of his kingdom In any case, they probably belong to some district in which the use of lead for the currency was established, but it is impossible to decide whether this district belonged to the Western Kshatrapas or to their conquerors The type 'Humped bull' is found on potin coins struck by earlier members of the dynasty in Malwa (98-99), and as certain lead coins

7. Catalogue of Indian Coins, Andhras and Western Kshatrapas pp cxliv to cliv

of the Andhras have also been attributed to this reign (73), *it is possible that these coins may show that the power of Rudrasena III was temporarily confined to some portion of Malwa* Unfortunately, no precise record of the provenance of these square lead coins seems to have been preserved

" The only certain date on the coins of the Mks Swāmi-Simhasena, sister's son of Swāmi-Rudrasena III, is 304, but it is quite possible that the date on one specimen should be restored as '306', since the remaining traces of the unit figure suggest rather the numeral '6' than the '4' of this period (p 189, Pl xvii, 905, v inf 'Numerals') "

19 It is not at all unlikely that the gap in the coinage of Rudrasena III and the debased form of the coins themselves, the lead coin-type of the 'Humped bull' (of the period 358—372 A D), and the accession of a sister's son, Swami-Simhasena after Rudrasena III, are explained in terms of (*a*) the Saka attack on Gupta's territories, (*b*) the Gupta dynasty's misfortunes lasting for some time, (*c*) Chandragupta's daring military feat, and (*d*) the expansion of the Gupta rule under Rāmagupta, etc There is no lead coin having the title Mahārāja Māhākshatrapa, and " Māhāraja Kshatrapa " might indicate a Saka ruler in Malava under Gupta supremacy, or a Saka ruler taking the title acceptable to the local people but subordinate to the Mahākshatrapa in the west. The latter is more likely

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(Dynastic Table of Rāshtrakutas of Mānapura)

Mānāmka (A D 375-400)
|
Devarāja (A D 400-425)
|

(Not known) (A D 425-440)	Avidheya (A D 440-455) (Grantor of Pandarangapatti Copper plate grant)	Bhavishya (A D 450-470) | Abhimanyu (A D 470-490) (Grantor of Undikavātikā Copper plate grant)

Fresh Light on the Chronology of the Protohistoric Gujarat

By

J M Nanavati

THE archaeological excavations at Lothal, Rangpur, Rojdi and Prabhas in Gujarat have revealed the presence and expansion of Harappa Culture in Gujarat They have now created a problem with regard to Chronological horizons and their interrelationships Recent C-14 determinations obtainable in respect of Lothal and Rojdi now help solve this problem to a large extent The beginnings of Harappa settlements in Gujarat may now be surmised to be nearer to about 2250 B C

While there is a general homogeneity of the pottery among different sites of the Indus proper, that of the Harappan sites within Gujarat exhibits differences which so far stood in the way of the determination of their relative chronology Till this day more than a hundred sites have been so far discovered in this territory and about a dozen have been excavated so far, Lothal and Rojdi being more extensively dug, are relatively more important

The excavations at Prabhas have revealed a new ceramic type called Prabhas Ware The ware comes from Period I B there and occurs along with Harappa ware This also helps in the determination of the relative position of Prabhas, Rojdi and Lothal Prabhas ware is normally pink, or grey slipped On the whole the ware is well-fired Rounded bowls with bevelled rims, dishes, pots, lamps, dishes-on-stand, constitute the major bulk of the vessels in Prabhas ware The decoration mainly consists of panalled motifs, criss-cross lines, wavy lines, etc The ware occurs in very small quantities in Period I B at Rojdi and probably from Period A IV of Lothal

Turing to Rojdi, the excavators have revealed three periods of occupation, the First one, which is Harappan, is divisible into two phases 'Red ware' is more conspicuous in I A while Buff ware dominates the scene in I B Convez sided-bowls, square-rimmed jars, dishes as well as dishes-on-stand, perforated vessels, and goblets are available during this period The typical Fink Pare of the Lothal and Rangpur type is also available in small quantities In addition, crude corrugated ware is also known from both the phases

Supporting the evidence of pottery and associated finds, now comes an important C-14 determination for the middle levels of Period I B at Rojdi which is 3920+115 or approximating 2000 B C for the beginning of phase I B, and thus contemporaneous with Phase A III b of Lothal The beginnings of the settlement at Rojdi could be well nigh 2150 B C and thus not later in any appreciable way from the foundation date of Lothal Prabhas Period I B is now interlocked and must be coeval with Rojdi I B and Lothal III The tangle of Chronology is now almost solved

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A-2313—II-B

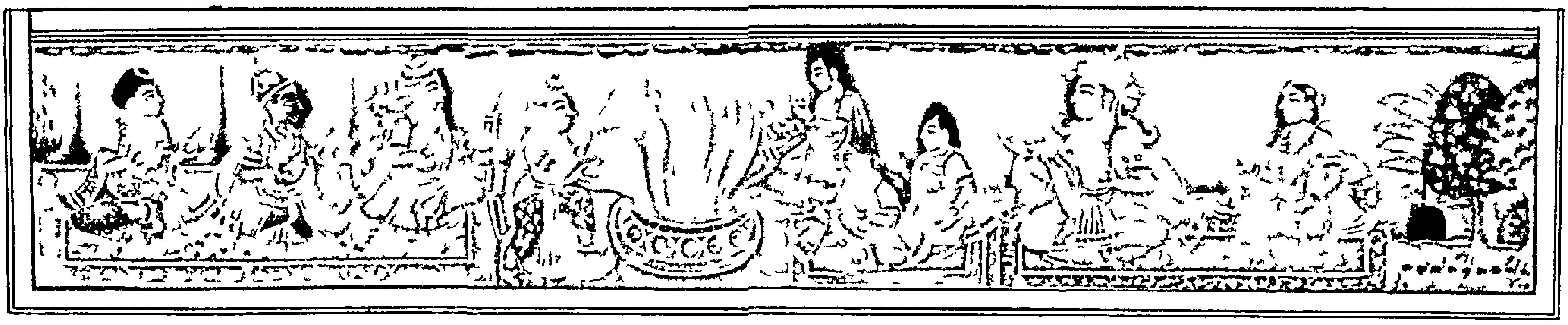
An Illustrated Manuscript of Jñāneśvarī dated Śaka 1685 (A.D. 1763)

By V P RODE

Illustrated manuscripts of religious works such as Rāmāyana, Mahābhārata, Bhāgavata, Pancharatnagitā, Devimahātmya, etc, are known to exist in private and public collections Such illustrated works were generally got prepared by the former rulers in the country A fairly rich collection of illustrated manuscripts seems to have existed in the Pothikhānā of the former Bhonsle ruler of Nagpur The entire collection of manuscripts belonging to them cannot now be seen at one place as it has been divided between the two families of the Bhonsles The Senior Bhonsle family is now headed by Raja Bahadur Fattesingh Rao Bhonsle and the Junior Bhonsle family by Raje Pratapsinghrao Bhonsle The Senior Bhonsle family has donated a small set of illustrated and illuminated manuscripts to the Central Museum, Nagpur, which contains beautiful works such as Bhāgavata, Pancharatnagītā, Devimahātmya and Rukminiswayamvara There are copies of Bhāgavata and Gītā both in book-form and scrolls The profusely illustrated work is a commentary on Bhāgavata There are only three skandhas of this work in the Museum It is not dated still it may be taken as written and also probably illustrated at Nagpur in the latter half of the 18th century (Colour Plate B, C and Plate XV) and the two sheets giving the details of illustrations in this work indicate the quota for the illustrations on each of the folios and probably served as a guide to the artists who illustrated the entire manuscript

Duryodhana in his Chariot
Illustration from Bhāgavata

There was an interesting illustrated manuscript of Śakuntalā in Hindi dated Sam 1845 A D 1789 in the possession of Raje Pratapsinghrao Bhonsle which was first exhibited in the London Exhibition of 1948 The same is now in the National Museum, New Delhi, and has been published in the joint issue of *Lalitkala* Nos 1 and 2, April 1955—March 1956 There may be still many interesting illustrated works in the collection of Raje Pratapsinghrao Bhonsle



Yajna — Illustration from Bhāgavata

The present work is a Marathi commentary on the Bhagavadgītā by the saint-poet Jñāneśvara who flourished during the reign of the Yādava ruler Rāmachandra (A D 1271—1311) Jñānesvarī or Jñānadevī as it is known is regarded as one of the most valuable works relating to the Bhakti School The Bhagavadgītā is one of the most sacred books of the Hindus and the Āchāryas of each of the various sects have written the Bhāshyas on this work The Jñānesvarī stands supreme amongst the Marathi commentaries on the Bhagavadgītā

Saint Jñāneśvara wrote his Bhāvārthadīpikā or Jñāneśvarī in Śaka 1212=A D 1290 but the original manuscript is not available So far several manuscript copies of this work have been discovered In the course of time the scribes who copied this work made several changes in the text, some having added more verses to the original The saint-poet Ekanātha collected such manuscripts and edited a corrected version of the Jñānesvarī text in Śaka 1506 = A D 1584

The present work is different from the Ekanātha's edition of Jñānesvarī [1] It has adopted the method of commenting on the Ślokas of the Bhagavadgītā by giving the gloss word by word This method of giving the gloss in such a manner seems to have been introduced by one Govind Baravā in Śaka 1613=A D 1691 as is clear from the following well-known verse —

शके सोळा शते तेरोत्तरे ॥ तै पद्धति केली ज्ञानेश्वरे ॥
गोविंद बरवा मुखातरे जग जीवन लेखक ॥[2]

The present work Jñānesvarī comes from the collection of manuscripts in the possession of Shri Rambhau Salpekar[3] who is the owner of the 'Devaghara' in the Mahal area of Nagpur city It was first noticed by Shri D G Lande, former Secretary of the Vidarbha Samshodhana Mandala, Nagpur, who has mentioned it in his work नागपूरचा सांस्कृतिक इतिहास published in 1954 Shri Salpekar's Devaghara is known from the time of Sena Saheb Subha Raghoji III (A D 1818—1853) The revered Purnānanda Swāmi was the *purānika* of Raghoji III He used to read Jñānesvarī and the Bhagavadgītā and visit the Jāgriteshwara temple every day He gave the property to his disciple Shri Gajanan Tatya Salpekar In the Devaghara collection there is another manuscript of Jñānesvarī which also gives the gloss word by word but it is not dated

Another peculiarity of the present work is that it contains some additional verses which are not found even in other copies which have adopted this method of giving the gloss word by word This fact was first brought to my notice by Shri P J Chinmulgund, I C S The work was studied from this point of view lately by Shri Sonopant Dandekar at the instance of Shri Chinmulgund As the present article is not written to show the peculiarities in the text the additional verses are not quoted here

The real importance of the work lies in the fact that it is the only *illustrated* copy of Jñānesvarī so far found or known to the present writer Illustrated copies of other religious

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[1] The devotees of Jñānesvarī in the post Ekanātha period do not seem to have uniformly preferred the text corrected by Ekanātha as many writers have copied the pre-Ekanātha period text of this work The earliest MS of Jñānesvarī so far known is the one which late Rajawade found at Bir Another early manuscript with pre-Ekanātha period text is the Madgaonkar's manuscript which has also come from the same place from where Rajawade's manuscript came Among other interesting manuscripts of Jñānesvarī mention may be made of the following —

1 The Śāligrāma manuscript, dated Saka 1572
2 The Gopālasramasvāmi manuscript, dated Śaka 1674
3 The Niranjāna Raghunātha manuscript, dated 1770
4 The Barawā manuscript, dated Śaka 1613

— Introduction to Jñānesvarī published by Govt of Bombay, Śaka 1882

[2] The original Barawā manuscript of Jñānesvarī which is known as 'Jñāneśvarī-pada-paddhati' has recently been found with Shri Sitārāmpant Ashtekar of Kolhapur It is written by Jagajivana as was dictated by late Govinda Barawā in Śaka 1613=A D 1691 The Barawā family of Singwe is known from the time of Bajirao I (A D 1720-1740)

— Introduction to Jñānesvarī published by Govt of Bombay, Śaka 1882

Prior to the discovery of the Barawā manuscript it was from the MS copies, like the Rajawade Samshodhan Mandal MS No 346 dated Śaka 1679 which gives the ovi शके सोळा शते तेरोत्तरे ॥ etc, and from Shri Vipra's MS, dated 1642 it was only conjuctured that the method of commenting on Ślokas in this way was introduced by another Jñānesvara in Śaka 1613=A D 1961

[3] I am indebted to both Shri Bhausaheb and his son Shri Babasaheb for their kind permission to publish this article

works such as Rāmāyana,[4] Mahābhārata[5], Bhāgavata[6], Pancharatna[7], etc, have no doubt been discovered in the country, yet an illustrated copy of this work is not hitherto known

The present work is bound in two volumes The cover is decorated with a floral design embossed in gold on silk The letters श्रीराम जयराम जयजयराम which are in the centre are in relief The wrapper flap is provided with a silver screw turning anti-clockwise in the Indian manner on the front side of both the volumes The size of each volume is 37 7 × 25 5 × 6 7 cms The folios are of smooth hand-made paper They measure 37 × 25 cms The margin is generally 2 5 cms broad The writing is uniform, the letters being generally 1 25 cms in height except at the end of the adhyāyas where they are bigger The first volume has 325 folios comprising the first twelve adhyāyas The second volume has 291 folios and contains the remaining 6 adhyāyas Of the 325 folios of the first volume, 58 have decorated borders and 36 folios show miniatures on them At the end of the 10th adhyāya there are four folios with decorated borders but these are left blank In the second volume, only a few folios are decorated with borders There are only 6 folios with miniatures in this volume The first and the tenth adhyāyas are profusely illustrated while the 2nd, 4th, 5th, 7th, 8th, 13th and the 16th are not illustrated at all

Every folio has a border but is not uniformly decorated Of the 58 folios with decorated borders in the first volume no two folios have the same border repeated The borders show various floral designs There are a few geometrical designs also used for decorating the borders in this work The decorated borders have a pleasing colour combination Gold and silver has been profusely used besides red, green, blue, yellow and violet colours for the border decoration In some borders space is occupied by miniatures The opening folio of the 10th adhyāya is a pleasing specimen showing monkeys on trees and bears walking in lines Some borders are with water and fishes design There are only five full-page illustrations Generally one or two miniatures are seen on folios with illustrations

The Sanskrit ślokas are written in gold over a monochrome background within a decorated border Each Sanskrit word from the sloka commented upon in Marathi commences in red ink The *ovis* are all written in black ink

The miniatures have a uniform monochrome background The colours used are red, green, blue, yellow, grey, and violet The miniatures are in a mixed style of the Rajasthani and the Deccani, the influence of Rajasthani being more predominant The male costume is of two types, in one type mukuta, dupattā and dhoti are worn, in the other type turban, jāmā, patka and trousers are used In some figures a queer combination of mukuta, jāmā, farji, patka and trousers is also seen The female costume which is typically Deccani in style consists of *choli* and *sakachchha* sari with one end passing across the chest and covering the head The ornaments consist of sishmang, ear-rings, necklaces, armlets, bangles, anklets, finger-ring nose-ring, etc

4 Following are some of the interesting illustrated manuscripts of the Rāmāyana —

1 A Persian version of the Rāmāyana which was illustrated by the orders of Akbar in the closing years of the 16th Century A D now kept in the Jaipur Pothikānā
2 The Bhārata Kalā Bhavana manuscript of Rāmāyana C 1630 A D
3 Khajānchi collection manuscript of Rāmāyana of the Malva School, dated C 1635
4 Prince of Wales Museum copy of the Malva School, dated 1649 A D It was painted by Manohar
5 The Sarasvati Bhandar, Udaipur, MS is dated 1651 which was written and probably illustrated at Chitor

5 Of the Mahābhārata also the earliest known illustrated copy is in Persian version and is known as Razma nāmah which was illustrated by the order of Akbar and now kept in the Jaipur Pothikhānā

The Mahābhārata Udyogaparvan from Prājna Pātha Shālā, Wāi, is dated between 1690 and 1700 J I M, Vol VIII, Lalitkala Nos 1 and 2

6 The earliest illustrated example of this work is the Bhāgavata Daśamaskandha of the Jodhpur Fort Pustaka Prakashan, dated 1610 A D J I S O A, Vol 10

The Bhandarkar Oriental Institute copy of the work is dated 1648 and it was painted by Sahābadi Equally interesting illustrated copies of the work are in the collection of the Bharat Kala Bhavana, Varanasi, Gopikrishna Kanoria, Calcutta and Dr Motichandra, Bombay

—Mewar Painting Lalitkala Publication

7 Pancharatna in the Decani Style now kept in the Bharata Kalā Bhavana was used for daily reading by Bajirao I, 1720—1740 A D

There is a marked tendency for the faces to be rendered in oval or round with large eyes and curved noses slightly swollen in appearance

Since the work is dated, the period of the miniatures is also established beyond doubt It throws a new light on the fact that there existed an atelier in which such works of art were created at Nagpur The fact that artists were encouraged during the Bhonsle period becomes clear also from the wall paintings of the Mahākāli temple at Chandrapura[8] and the Jain temples at Bazargaon[9] on the Nagpur-Amravati road The present work not only gives a date showing the time of its completion at the end of the last adhyāya but provides dates for different adhyāyas showing the progress of the work The colophon of the 5th adhyāya which gives the date and the name of the scribe runs thus—

स्वस्ति श्री नृपशालिवाहन शके १६८५ सुभानुनाम सवत्सरे वैशाखमासि धवलपक्षे चतुर्थ्यां तिथौ श्रीमज्जानशाह सेवक साठ्योपनामक गोपीनाथ सुत नारायणेन लिखित वासरे रवौ इति ॥५॥

From the above colophon it is learnt that Narayan Sathe, son of Gopinath and an employee of Jānashah [(*i e*) Senasaheb Subhe Jānoji Bhosle (A D 1755—1772)] completed the 5th adhyāya of the manuscript on Sunday, the 4th tithi of Vaisākh sukla in Subhanu Samvatsara of Śalivāhana Śaka 1685, *corresponding to* Sunday, the 17th April 1763 A D That such a profusely decorated work can only be undertaken at the instance of a ruler has also been confirmed by the above colophon It is only the royal patronage that can encourage the artists to produce such a marvellous work of art and that such a patronage was given by the Bhonsles of Nagpur has been established beyond doubt Shri Adris Banerji in his article on the illustrated manuscript of Śakuntalā referred to above expresses hope of finding some treasures of art in the Bhonsle collection and the present manuscript has proved beyond doubt that the Bhonsles of Nagpur were great patrons of Arts and encouraged artists who produced marvellous works of art for them

The other colophons in the work show that the 7th adhyāya was completed on the 11th tithi of Jyeshtha śuddha, the 9th on Ekādaśī in the intercalary month of Āshādha The Paksha of the month is not given in the colophon, but in Subhānu samvatsara Ashādha Sukla Ekādasī fell on Wednesday, the 20th July 1763, and Krishna Ekādasi on Friday, the 5th August 1763, A D According to Diwan Bahadur Swami Kannu Pillai the intercalary month in Subhānu was Jyeshtha In Sewell's Indian Calendar according to Surya Śiddhānta (Page 322) the *nija* masa was Āshādha

The tenth adhyāya was completed on the 8th tithi of Śrāvana, the eleventh on the Janmāshtami day of Śrāvana, varshā ritu in dakshināyana The colophon of the 17th adhyāya reads as under —

शके १६८५ सुभानुनाम सवत्सरे दक्षिणायने वर्षा ऋतौ श्रावण मासि कृष्ण पक्षे जन्माष्टम्या नागसाव्हय पट्टण साठ्योपनामक गोपीनाथ सुत नारायण नामकेन लिखित श्री विश्वरूपार्पणमस्तु शुभ भवतु श्री

It gives the name of the place, where the work was written, as Nāgapattana for Nagpur The 12th and the 13th adhyayas were completed by the Ekādasi of the month of Bhādrapada The 14th adhyāya was ready by Monday, the 10th tithi of Bhādrapada Krishna paksha It seems possible that the 14th adhyāya was written and completed before the 13th adhyāya and hence may not be taken as a discrepancy

In the colophon of the 15th adhyāya the name of the place is again given as Nāgpura Pattana This adhyāya also seems to have been written earlier than the next, *i e*, 16th adhyāya which was completed on Sunday, the Vijayādaśami in the month of Asvina, the 17th adhyāya was completed on Thursday, the Ekādaśī day of the Krishna paksha of Kartika and the last, i e, the 18th adhyāya was completed on Thursday

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8 Ancient India No 9, 1953, Pls XC VII-C and Indian Archaeology, A review, 1954-55, Pl LX Fig A

9 There are interesting mid-nineteenth Century paintings in the Jain temples They show scenes from the life of the Tirthankars as well as scenes from Rāmāyana and Mahābhārata The author intends to study these paintings in detail soon

the 13th tithi of the Krishna paksha of the month of Māgha in the Śaka year 1685 In fact Māgha Krishna 13 fell on Wednesday Feb 29, 1764, A D If the month Māgha is a mistake for Phālguna in Subhānu then the week day would be Thursday, March 29

Except for a minor discrepancy in the last mentioned date the rest of the dates at the end of various adhyāyas have been verified and are found correct[10]

DESCRIPTION OF THE MINIATURES

Volume I

Adhyāya 1 Folio No 1

It contains two miniatures, within a gold border decorated with floral meanders (1) The first miniature (15 6×9 9 cms) shows the Blue God on a leaf floating on water On the right is a sage swimming in the ocean (2) The second miniature (11 4×15 6 cms) shows Vishnu lying on the Śesha in the ocean Lakshmi is seated near his feet To the right are standing four warriors It has a red background Colour Plate D 1

On the reverse is a miniature (15 6×24 cms) showing Ganesa seated on a lotus seat and attended by two ladies Ganesa wears a flowered Dhoti and an elaborate Mukuta He has six arms which represent the six darśanas Both the female attendants are shown wearing choli and *sakachchha saris*

Folio No 2

It has on the reverse a miniature (9 4×6 cms) showing on a red background Sarasvatī riding on a mayura holding a beaded string in its beak The goddess wears a brocade and a Mukuta and holds a *vina* with two gourds

Folio No 3

It has a miniature (15 8×10 1 cms) with green background showing sage Nivritti seated He wears a *Pitāmbara* and a white scarf In his front are the book and a parrot on a stick

Folio No 4

It has two miniatures, the upper one (15 9× 11 9 cms) shows on a red background Vyāsa and Vaishampāyana and in the lower are (11 6× 15 9 cms) king Janamejaya and Vaishampayana The king is seated on a royal seat attended by a chāmara-bearer

Folio No 6

It bears on obverse a miniature (7×7 cms) showing Śiva with Pārvatī on his lap

On the reverse is a miniature showing saint Jñāneśvara and his sister Muktābai seated on a wall On the right is shown sage Chāngadeva on tigerback and attended by two disciples holding a Chāmara and Vyajana

Saint Jñāneśvara performed the miracle of moving the wall for which sage Chāngadeva accepted Jñānesvara as his Guru

Folio No 7

It bears on the obverse under a mihrab a miniature (14 3×9 cms) showing the blind king Dhritarāshtra addressing Sañjaya who possesses a divyadrishti King Dhritarāshtra is seated on a royal seat with umbrella and an attendant, while Sañjaya is seated on the left against red background On the reverse of the folio there is a miniature (14 2×6 5cms) showing Duryodhana attended by an umbrella-bearer and Drona with an attendant Since Drona is a Rājarshi he wears a Mukuta Dhritarāshtra wears *achakan* farji, trousers, kamarbandha or a scarf

Folio No 11

It has on the obverse a miniature with green background (14 3×10 4 cms) showing Rājarshi Bhishma in a chariot and blowing his conch The chariot is like an Ekkā and is drawn by two horses, below against a red background are shown musicians on foot, on elephant back and also on camel back In the lowermost line there is a warrior on horseback wearing a typically South Indian (Maratha) pagadi Colour Plate D 2

Folio No 12

It shows a miniature (14 3×15 6 cms) with red background It shows Arjuna in the chariot which is drawn by four horses He blows his conch Devadatta The driver is Lord Krishna and he also blows his conch 'Pānchajamnya' The chariot has a कपि ध्वज Colour Plate E 2

10 M M Dr V V Mirashi and Shri N L Rao have kindly verified these dates for me

Folio No 13

The miniature (14 2×8 3 cms) shows four warriors blowing their conches All the four warriors are shown wearing wooden sandals

Folio No 23

It bears a miniature (14 5×13 9 cms) with vermilion background It shows Arjuna and Krishna seated on a chariot Arjuna is deeply agitated but lord Krishna speaks to him in order to quell his agitation and removes his doubts On the left there is a chariot with two horses Arjuna's chariot on folio No 12 has four horses while here it is only with two horses On one side of the seat of the chariot is a curtain against which is a cushion

Adhyāya 3 Folio No 6

It has on the obverse a miniature (14 4×6 6 cms) showing Brahmī addressing the people (prajā) to achieve their well-being with the help of Yajña, in the centre which was like a Kāmadhenu A cow with a calf represents Kāmadhenu

Adhyāya 6 Folio No 12

It bears a miniature (6 1×5 2 cms) showing Śiva seated on a tiger-skin On the right is a tree.

Folio No 24

The miniature (14 1×17 6 cms) shows a Yogi engaged in meditation

Adhyāya 9 Folio Nos 26 and 27

Both show a flowering plant in a pot

Folio No 33

It has a miniature (6 5×4 cms) in the right hand corner of the area with the floral border It depicts the scene of Gajendra-moksha The elephant, who was sporting with his mate, was caught by a crocodile and Lord Vishnu who ran to his help is shown killing the crocodile with his disc

Folio No 35

It has a flowering plant design At the bottom of this design is a scene of Krishna sporting with the Gopis It is divided into three compartments, in the centre of which is Lord Krishna while on both sides are the gopis One Gopi on the right has a vinā in her hand

On the obverse, within an area (14 2×10 8 cms) are shown four scenes in four small compartments in the following order (1) Krishna killing Kamsa, (2) A group of Gopis, (3) Nārada, Dhruva, Akrura and Śuka, and (4) Sanaka, Sanandana, Sanātana and Sanatsujāta engaged in meditation

Adhyāya 10 Folio No 3

A miniature (14 4×6 1 cms) showing the fight between Rāma and Rāvana Rāvana who has ten heads wears a muslin dress consisting of a fargi and trousers The heads show pointed beards Rāma holds bow and arrow He wears wooden Sandals

Folio No 7

Within an area (14 2×17 cms) are shown 12 compartments In the first 8 compartments are shown seven Rishis, i e, Kāshyapa, Atri, Bharadvaja, Viśvāmitra, Gautama, Vasishtha and Arundhati In the remaining four are the Manus

Folio No 17

There are four miniatures, i e, Vishnu, the Sun, Marichi and the Moon On the reverse at the top in two compartments are shown a male figure representing Sāmaveda, Indra on a royal seat with umbrella and attendants In the other two are written the words मन and चेतना

In the lower half is a scene showing Śiva at Kailāsa with Pārvati on his lap and Nandī, in the front The miniature has a vermilion background

Folio No 18

Within a silver border with water and fishes are shown five miniatures The topmost miniature shows Kubera in his plane In the next two compartments are shown Fire God अग्नि and the mountain Meru The remaining two compartments show Brihaspati on a golden seat and Skanda on the back of a peacock

On the obverse are shown in small square areas the sage भृगु the letter ॐ and a male figure engaged in जप

Folio No 19

Four miniatures showing the mountain Himālaya, the Ashvattha tree Devarshi Nārada with vinā and Chitraratha Gandharva in a

crescent shaped flying chariot On the reverse there are four miniatures showing (i) Kapila Rishi, (ii) The horse Uchchaishrava, (iii) Aiarāvata, and (iv) a king with attendants

Folio No 20

It has 8 small compartments In the upper four are shown (1) weapon (Sword), (2) cow and calf (3) Madana with flower bow and arrow and (4) the snake Vāsuki The lower two compartments show (1) Ananta Nāga, (2) Varuna on crocodile The third one is blank which should have contained a figure representing आर्यमा On the reverse in a small square Yama on buffalo

Folio No 21

There is one miniature (14 3×9 5 cms) showing Narasimha with Hiranyakashyapu in his lap The God is tearing Hiranyakashyapu's belly On his right is his devotee Prahlād and on left Prahlāda's mother Kayādhu The background is red

The other three small compartments show (i) a person beating the gong, near his seat is kept a ghatikāpātra both representing Kāla (Time), (ii) Lion as Lord of the wild animals, (iii) Vainateya or Garuda

The reverse has in the lower half a very fine miniature (14 3×2 cms) showing Rāma and Sītā seated on a golden seat On the right are the three brothers Lakshmana, Bharata and Shatrughna holding respectively छत्र, चामर and व्यजन On the left are on a high seat three Rishis Hanumāna occupies his seat close to Rāma Rāma and his brothers wear Mukuta, Dhoti with gold border and ornaments such as bracelets, ear-rings and necklaces They hold bow and arrows in left hand Sītā wears a choli and a *sakachcha* sari and ornaments, *i e*, sishmang, nose-ring, ear-plugs, necklaces, bangles and belt She holds a lotus flower in the right hand

The rolled curtain at the top and the chandelier (?) suspended from the ceiling are worth noting Rāma was the tutelary deity of the Bhonsles of Nagpur and the present work being executed under Jānoji Bhonsle's patronage, the manuscript writer probably thought it fit to introduce this panel

The decorated border showing monkeys on trees and the bears in rows is very interesting The animals may be compared with those in a 18th century Rajasthani miniature depicting Setu-bandha (No 32 of Hindi Guide Book of Bharat Kala Bhavana, Varanasi)

In the area above this miniature and in the portion occupied by text is inset a square (5 4×5 cms) miniature showing God Pavana riding on an antelope Colour Plate E I

Folio No 22

Two compartments (14 3×4 cms) show मकर floating on water and a female figure representing Gangā At the bottom are three compartments in an area (14 3×5 2 cms) in which are shown respectively (i) in three sub-divisions some forms of architecture representing सर्ग with आदि, मध्य and अंत, (ii) a Sādhu engaged in Sādhanā representing *adhyātmavidyā* and (iii) two persons having discussions

Folio No 23

In four small areas (1) अ for अक्षर, (2) Two persons for द्वंद्व, (3) A seated figure representing काल and (4) Brihaspati with four-heads seated on lotus On the reverse in an area (14 3× 11 2 cms) are shown eight compartments with a female figure in each of them excepting in the first one The figures represent Kirti, Śrī, Vāk, Smriti, Medhā, Dhriti, Kshamā

Folio No 24

There are three small compartments with an arch in each one The fourth compartment shows flowering plant representing कुसुमाकर In the lower half are four arched areas with (1) Chausar pat, (2) Lamp and drum-beaters, (3) शिव and a tiger, and (4) cow and calf

Folio No 25

The miniature shows Vāsudeva, the lord of the Vrishnis, seated on a high seat In his front is seated Arjuna On the reverse, in small area are shown two figures representing Vyāsa and Ushānākavi

Folio No 26

In four small compartments are shown (i) A person with a whip in hand and a rope in the other holding a culprit, the whole representing दण्ड, (ii) नीति is represented by a scarf tied to a bar, below a pot (?), (iii) A sādhu engaged in जप

representing मौन (silence), (iv) A sage with a माला in hand standing for ज्ञान

Adhyāya 11 Folio without number

It contains one of the most beautiful illustrations in this MS Within a black border decorated with a creeper, the leaves of which are in gold, is a scene showing the meeting of Hari and Hara The illustration is divided into three areas, the upper one with red background shows Hari and Hara in close embrace Hari is shown as Blue-God while Hara is white in complexion In two of his arms Hari holds Śankha and chakra He wears a Kirita Mukuta, Pitāmbara, Hāra, Kundala, Bracelets and Armlets and a scarf Hara has a Jatā-Mukuta in which is shown Gangā He has ten hands in which he holds lotus flowers He wears Rudrākshamālas, Tiger-skin and circular Kundalas Both Hari and Hara wear sandals On their either side is a female attendant The one on the right holds a flower in her right hand and a māla in left The female on the left holds a Panchārati

In the centre against a green background is shown a Tulasī Vrindāvana with a Śivalinga with a bull and cow and calf on sides

In the lower area are shown at different levels figure of the Ganas of both Hari and Hara In the left half are the Hari-Ganas representing Hanumān, Garuda and Gopas In the right half are the Hara-Ganas, *i e*, Ganesa, Sadānana, Vyāghramukha, Rākshas and the other figures which may be common to both such as Nārada, Tumbara, Gandharva and Kinnara

It is interesting to see Ganesa wearing Mukuta, long Chapkan of muslin cloth and Farji Colour Plate F

Folio No 5

It has a miniature (7 × 9 cms) showing Varāha lifting the earth

Folio No 14

The miniature shows Yaśodā beating her son Krishna

Folio No 15

It has a full page illustration showing Arjuna and Krishna in the chariot, in the foreground is a garden with a fountain The red border has a creeper design with leaves and flowers in gold

Folio No 16

There are three miniatures on this folio which occupy the whole space within the decorated border The upper miniature (9 × 14 3 cms) shows five figures, the two of which represent वायु and चन्द्र The central panel (8 9 × 14 3 cms) has five standing figures, the two of which are Rākshasas The third panel (7 5 × 14 3 cms) has four male figures shown running

Folio No 55

The miniature (11 8 × 10 6 cms) set in a black border with the design in gold shows the Goddess Tripurasundarī seated on a high golden seat She has ten hands in which are held the āyudhas She wears mukuta, ornaments and a rich hāra

Volume II

Adhyāya 14 Folio No 1

The miniature shows a rājarshi seated on a tiger-skin and against a cushion He represents the Guru Nivrittinātha (?)

Adhyāya 15 Folios Nos 4 and 5

Show trees with roots at the top and branches below and obviously refer to the well-known verse ऊर्ध्वमूल मध शाखा, etc

Folio No 11

Tree with roots at the top and branches and leave spreading downwards On the leaves is written the Śloka अधश्चोर्ध्वं, etc

Adhyāya 18 Folio No 86

The miniature (14 3 × 8 5 cms) shows Krishna embracing his devotee Arjuna

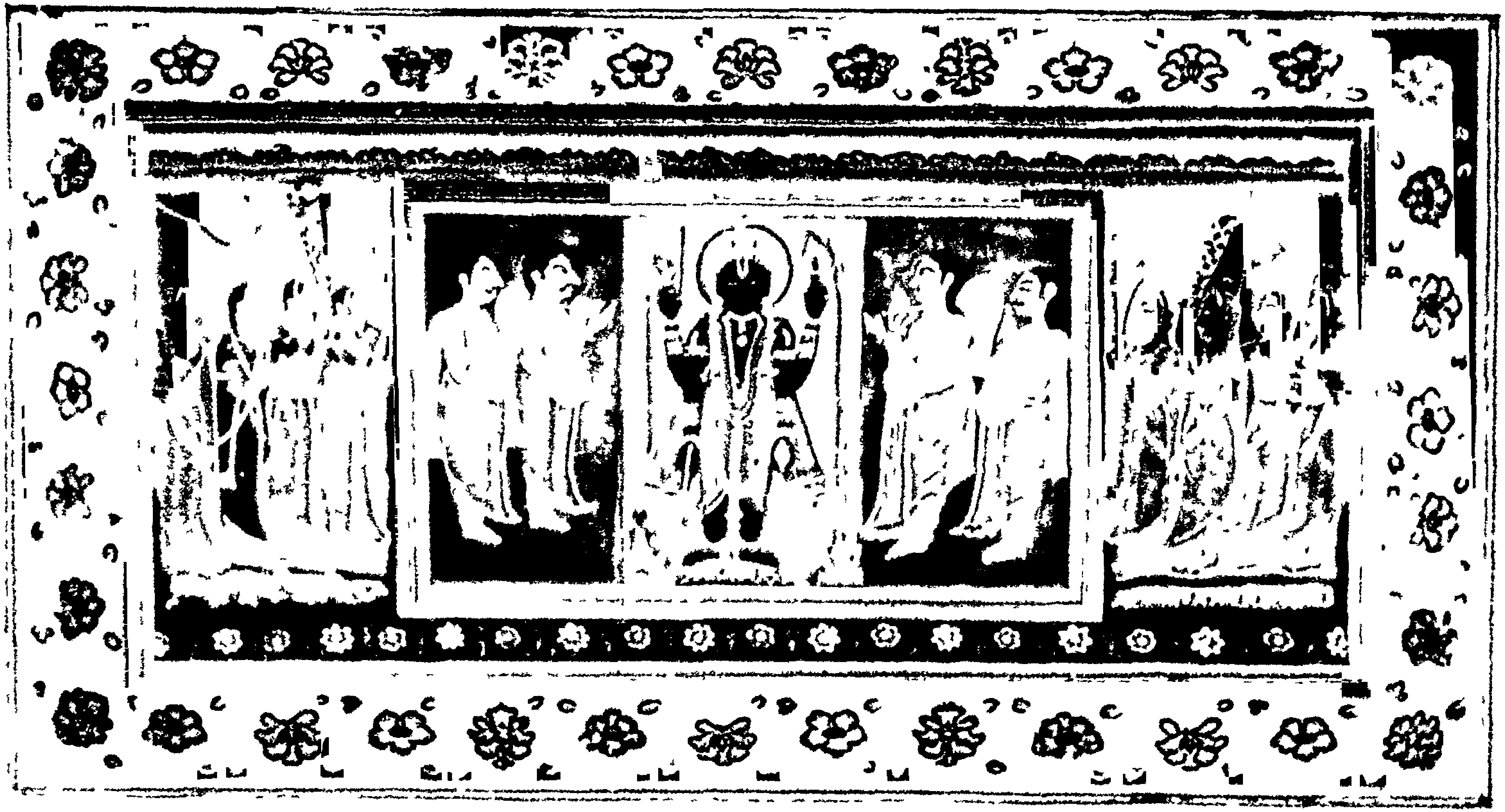
Folio No 96

It shows Sañjaya talking to Dhritarāshtra who is seated on a royal seat with an umbrella Sañjaya is seated on a carpet

Folio No 106

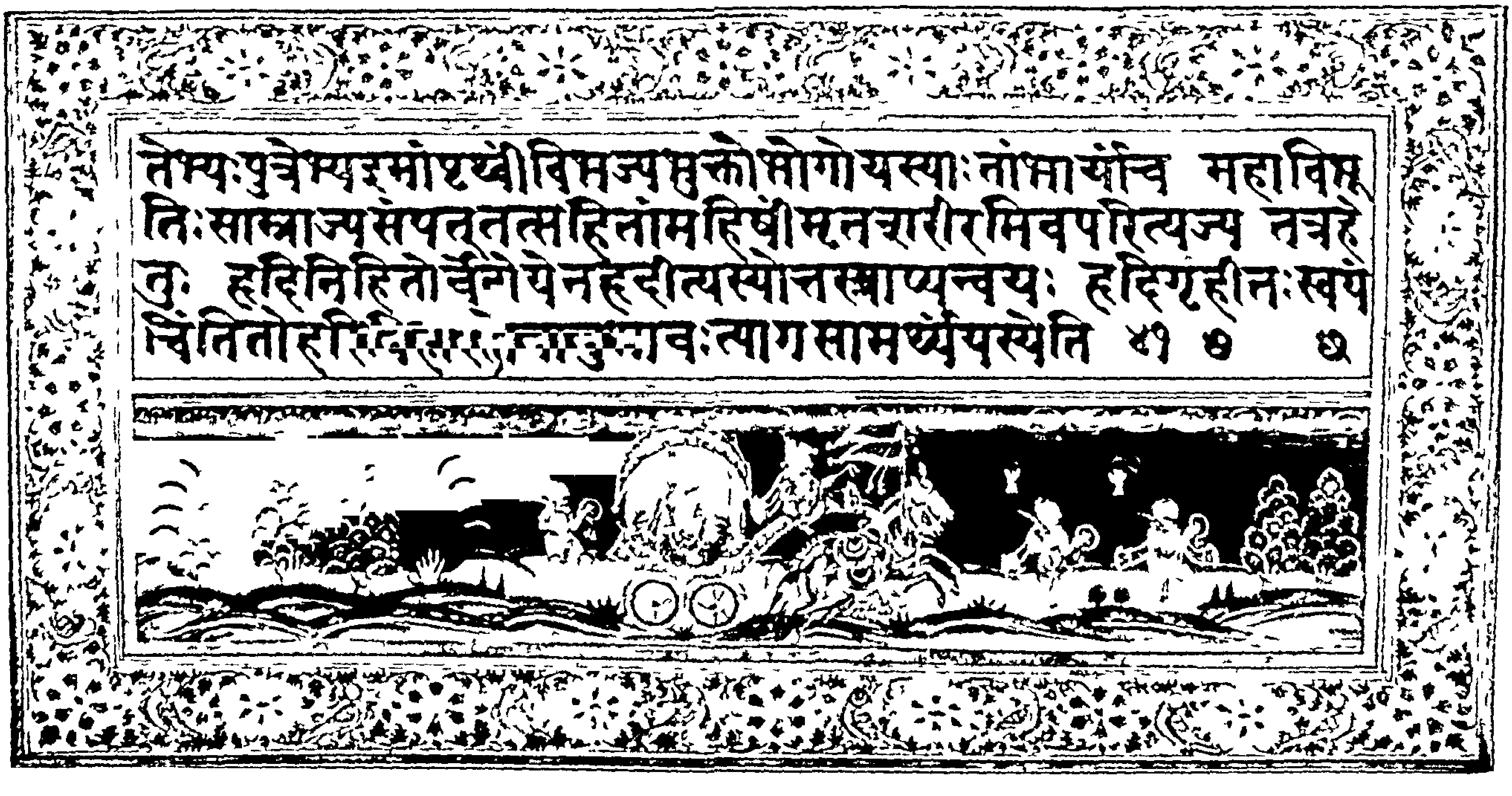
The last of the illustrations (11 7 × 5 5 cms) in this MS shows Śiva and Pārvatī In the foreground is shown the ocean with fishes Pārvatī is shown with folded hands

PLATE C



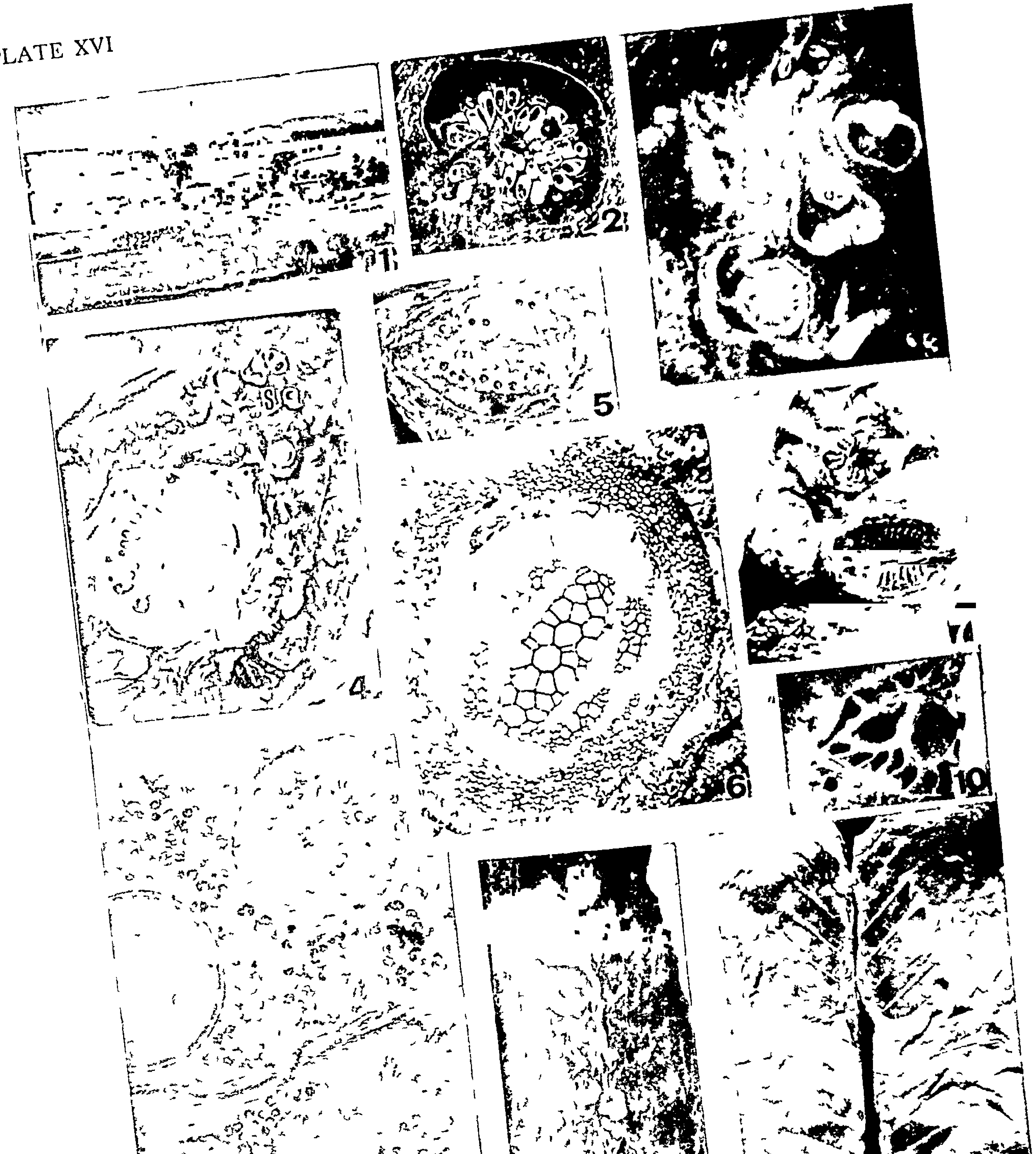
सटीक भागवताच्या पोथीचे
एक पट्ट

A page from Bhagwat.


तेभ्यः पुत्रेभ्य इमां पृथ्वीं विभज्य भुक्तभोगो यस्याः तां भार्यां च महाविभू
तिः साम्राज्य संपत् तत्सहितां महिषीं मृतशरीरमिव परित्यज्य तत्र हे
तुः हृदि निहितो वैराग्ये येन हृदीत्यस्योत्तरस्याप्यन्वयः हृदि गृहीतः स्वयं
त्यागसामर्थ्यमस्येति ४१ ७ ७

24 A Page from Bhāgavata

PLATE XVI



25 Fossil Sections in Nagpur Museum

The Central Museum, Nagpur and its services in the cause of Palaeobotany

By

Professor V B Shukla, Ph D

Introduction

Among the innumerable contributions of the late Professor B Sahni, F R S, coming to his notable researches on the Zygopterideæ, one irresistably feels, rather simultaneously, the magnitude of service rendered by the different European Museums where the single specimen of *Zygopteris primaria* (6) broken somehow into different pieces at an earlier date lay under different names and designation till this master-mind with his unusually superb intelligence and sharp eyes picked them up all and like a juggler as if it were, put them together as the contiguous counterparts of a single specimen Studying all the pieces together Professor Sahni showed that the stem anatomy, leaf trace sequence and the root organisation in all these was similar to that of *Botrychioxylon* while the petioles were of *Etapteris* type Obviously, if this single type had been discovered earlier the genera *Botrychioxylon* and *Etapteris* would never have been founded and the actual *Zygopteris* would have retained its original stature Similarly, another Lower Permian stem from Chemnitz, *Grammatopteris baldaufi* (7) revealed the fact that it was not only simpler in anatomy but also geologically older than the allied types *Thamnopteris* and *Zalleslya* indicating its nearness to Osmundaceæ and Zygopterideæ It was thus removed from Botryopteridaceæ and placed in Zygopterideæ While the credit for these researches goes to Professor Sahni, it is shared rather equally by the different museums in Europe where these specimens had not only been carefully kept with proper labelling, date of collection and other details but which also provided various facilities to Professor Sahni for investigation and research

This Zygopteridean investigation is one of the many examples to illustrate the service rendered by the museums in the field of Palæobotanical research so much so that Indian material as well is coveted for research in the foreign Museums (4) It was perhaps on the pattern of these European Museums that the Central Museum, Nagpur, had been established just one hundred years back from now and looking at its galleries, particularly the palæontological section, it seems its foundation had been laid very well indeed While the museum owes a debt of gratitude to various other collectors, palæontologists and palæobotanists who have helped in enriching its collections, one cannot fail to make a special mention of the late Rev S Hislop who had perhaps done his maximum in this direction A missionary-*cum*-zealous geologist, he often combined his fossil collection-work along with his religious duties Moving about in a palanquin or on a horse back, on a bullock cart or elephant, crossing the uneven lands at Nagpur and its vicinity, the Chhindwara area—rich enough both in the Intertrappeans and the Archæan plexus, the Wardha zone with its flat topped hills, he often stopped for a while or put his camp for a few days, wherever he came across an outcrop of petrified

A 2313—12 A

plants and animals, made a collection as far as he could, labelled the specimens in his own hand and brought them as a coveted treasure to his headquarters at Nagpur Some of these specimens were deposited at the Nagpur Museum and others sent to the British Museum, London, where many of these perhaps still adorn the palæbotanical galleries To see the original labels in the hand of the late Rev Hislop is a thrill and they educate us even today in the importance of original labels, a factor which as the dictum goes has both solved and created new problems in the study of Fossil Botany It is for this reason, as we often see, many specimens are photographed and illustrated along with their labels in the text books and research papers This strikes a note of reminder to young workers and those in charge of museum to preserve the original labels as best as it could possibly be

Importance of specimens at the Nagpur Museum

Located in the heart of the Deccan Intertrappeans and within a compass of a day's travel to the fossiliferous localities of Takli, Bharatwada, Sausar, Paraspani, Mohgaon-kalan in one direction, Wardha, Chanda and Hinganghat in the other besides some isolated localities like Nawargaon beyond Kondhali or Jaulkheda near Betul, the Nagpur Museum could conveniently be the centre of collection of palæontological material from all these areas and it was possibly for this privileged position that this museum always attracted the attention of both Indian and Foreign palæobotanists During an approximate span of sixteen years from 1933 to 1949, in his numerous letters that Professor Sahni wrote to me, numbering easily over one hundred (now under publication) he often made a mention of the Nagpur Museum collections and here I recall when I first came to Nagpur in 1933, the Professor told me two things Never go to the class unprepared and secondly, he asked me to keep in touch with the Nagpur Museum for new collections besides making my own discoveries from the areas both known and unknown round about Nagpur It was this suggestion which provided me an opportunity of publishing my first research paper on a material from the Nagpur Museum, No F/250 a new species of *Dadoxylon*, *D deccani* (11) Subsequently, it became a part of the routine Practical classes for my Post-graduate students at the College of Science to visit Nagpur Museum for studying and sketching several specimens which till then we did not have in our own collection either from India or by way of exchange from foreign countries Such a centre of academic attraction not only for palæobotanists but even for a general botanist had the Nagpur Museum been that during my association with the College of Science, Nagpur, for over twenty-three years, some of the most renowned botanists when they came to my laboratory, either for conducting M Sc practical examination, for attending some Congress Session or for delivering a lecture, they besides being inquisitively interested in our original work, often wished to snatch a couple of hours visiting the Central Museum, Nagpur Professor Suzanne Leclerque of the University of Liege, when she visited us last, particularly wished to spend a day at the Nagpur Museum alone and during her next visit to India early January next, wishes to visit some of the Intertrappean localities besides seeing the fossil specimens at this museum It was during one such visit that Professor Sahni was attracted by a fine *Palmoxylon* specimen which had been in this museum since quite long On enquiry it was found that this specimen was not single but comprised numerous pieces which were all there in the museum With a smile, he remarked ' Is it going to be another Zygopterid ' The author subsequently had the occasion of getting all these pieces together and surprisingly enough it formed a long continuous stem easily over twenty feet in length It is my pleasant duty here to mention that this work of putting together *Palmoxylon* pieces which later was described by Professor Sahni as *Palmoxylon sundaram* (5, 9) and other allied works which we could do from time to time could be possible only with the help of my distinguished pupils—Prof M V Mirashi (Amravati), Prof Mrs L Hajarnavis (Nagpur),

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Prof Dr S Chitaley (Bombay), Prof Dr V Dnyansagar (Bombay), Dr P K Deshpande (Nagpur University), Dr J K Verma (Jabalpur), Mrs T Trivedi (Nagpur), Mr J N Dwivedi (Jaunpur) and Mr L C Singhai (Raipur), many of whom had a tinge of originality in their vision and are now ably occupying responsible teaching posts at different places In subsequent years, it may here be mentioned, the assistance rendered by Mr L C Singhai and another research scholar Mr R Kumar Shukla has been of a great value to me in the investigation of the Deccan Intertrappean flora

One may recall here the history of the *Enigmocarpon* (8) fruit Professor Sahni had discovered this interesting fossil fruit along with Professor K P Rode in the fields of Mohgaon-Kalan owned by Professor Rode's family Or it may be more accurate to say that Professor Rode had first discovered this fruit himself and subsequently when it was shown to Professor Sahni at Lucknow, both the botanists made some further collections This was as early as 1931 or 1932 At a later date, couple of years after, when I had a chance of seeing a similar fruit at the Nagpur Museum without any name assigned to it, our curiosity grew all the more regarding its identification Such a pretty fruit, so well preserved and yet enigmatic in nomenclature! More and more of the specimens came to our hand from the Mohgaon-Kalan fields and also from the hillocks at Bharatwada but the exact identification of the specimen could not be ascertained for it is so difficult to identify a fossil fruit alone The reason is obvious While the flowers of a family are definite in form and organisation, the fruits show a large range of variation We paid repeated visits to the Nagpur Museum for some further clues and while the curators, first Mr D'Abreu and later, Dr S S Patwardhan gave all the necessary help, we could not reach any definite conclusion Two other research scholars, Miss J Billimoria and Mr B C Tiwari were assigned the task of comparing this specimen with the living forms apparently similar to it During this period, the Professor availing of his visits to Europe made a study of this problem at various museums but in his own words 'It was all in vain' In the meanwhile some name had to be given to the specimen for the Botanical world Professor Sahni, therefore, published a small note on this fruit giving it the name *Enigmocarpon Parijai* (Enigma= riddle, Carpon=fruit), the specific name referring to the eminent botanist Professor P Parija in whose company Professor Sahni had often visited the Mohgaon-Kalan locality Later it was privileged for the College of Science laboratory to find a clue to this puzzling problem and it is with a hearty glee that I make a special mention of the devoted help received from the post-graduate students and research workers mentioned above in finding it The discovery of *Sahnianthus Parijai* (12), the most wonderful petrified flower which actually turned out to be the flower of *Enigmocarpon*, was on the laboratory tables of the College of Science, Nagpur, ultimately completed at the University of Lucknow under the able and inspiring guidance of the late Professor B Sahni Once the flower is known, the clue to the affinities becomes easier and as can be visualised it was the sacred privilege of the author to name the flower after his teacher and mentor

The other fossil specimens at the Nagpur Museum which attracted our attention were the Hydropterid sporocarp *Rodeites dakshini* named after Prof K P Rode, *Tricoccites trigonum*, *Cyclanthodendron* (10), *Veeracarpon* (the fruit genus of *Shuklanthus superbum* Verma), *Rhizopalmoxylon* (1)—several types, *Dryoxylon mohgaoense* (2), numerous dicot woods and quite a few petrified palm woods, including (3) *Palmoxylon Nawargaonense* Of the Jurassic flora one finds quite a few specimens of *Ptilophyllum*, *Pterophyllum*, *Nilssonia*, *Otozamites*, *Dictyozamites*, *Conites*, several coniferous woods and others There are many other specimens in the museum some perhaps yet to be identified

Research workers at other Museums

While it may mean quite an exhaustive list to make a mention of numerous research workers attached to different museums in the world

primarily conducting research in Fossil Botany, it may not be out of place to mention some to indicate how these museums are conscious of their responsibilities in this direction thereby making substantial contributions to the Botanical world besides fulfilling the academic object for which one looks up to them Not dwelling on the workers of the past, presently Dr F M Wonnacott, Department of Palæontology, British Museum, London, is working on the Cretaceous and tertiary Floras besides preparing *Fossilium Catalogue* (pro parte) Dr N F Hughes, Sedgwick Museum, Cambridge, is investigating the Lower Cretaceous Flora and Lower Carboniferous microfossils, Dr J W Franks at the Manchester Museum, Manchester, is contributing to the pollen analysis of British Interglacial deposits, Dr E Mary Dettman, again at the Sedgwick Museum, Cambridge, is working on the Australian mesozoic microfloras and Dr K C Allen at the same museum on the Devonian plants and Palynology of the Devonian of Spitsbergen While these are the references of just a few young workers, the contributions of eminent botanists like Professor O F Selling, Sc D, Director, Riksmuseum, Stockholm, Professor Dr R H Krausel Frankfurt, Germany, Dr Winifred Goldring, New York State Museum, and others during the present years and of Professors T G Halle, E A N Arber, D H Scott, F O Bower, Kidston and Lang and others, associated with different Museums in their country in one way or the other in the past, are too well known In fact, some of the most eminent professors like Professor A C Seward and Professor Hamshaw Thomas have also worked in association with various museums and today a student of Palæobotany knows well, it is mainly the contributions of these botanists on which we count for our studies in this field of Botany In most of the text books also, several illustrations are gratefully acknowledged to the different museums where the respective specimens—many of which are type specimens—are carefully preserved with proper labelling The question crops up therefore, why can we not have such an institution in our own country to which botanists can look forward for furtherance of knowledge, for investigation of their own collection, for comparison of specimens and for the exchange of material. And all this we can expect of the Central Museum, Nagpur, which already has a sound nucleus from the very inception in this respect It is true, the Museum authorities alone cannot do every thing in this context, they are there to afford facilities and conveniences, the rest depending on the co-operation of workers and researchers in the field

Some concrete suggestions for the development of the Museum

With well established institutions all round it, teaching up to the post-graduate standard or even further like the Nagpur University, Government College of Science, Nagpur, Vidarbha Mahavidyalaya, Amravati, the museum can get full co-operation from botanists and Zoologists in enriching its collection and the post-graduate or graduate students in turn can be advised and encouraged to avail of these specimens for their study and research The Museum could provide a wing, a small one to start with, for providing facilities for research and studies, with suitable equipment for the benefit of those who may like to avail of the Museum specimens Birbal Sahni Institute, Lucknow, working under the able guidance of President Mrs S Sahni is perhaps the most important and leading institution in India where a young Palæobotanist can be trained in the field of preliminary collection and investigation of specimens A staff member from the Museum, say in a newly created post, could equip himself with the necessary training at this institute and look after the Palæontological wing of the Museum which obviously is a desideratum today Once the wing starts developing, the flight will be automatic and the specimens stored at the museum today shall whisper among themselves 'It is not the sunset glow but the herald of a morn'

Explanation of Plate XVI

Fig 1 —A typical landscape from the Deccan Intertrappean Series showing flat topped hills. The base of these hills in certain localities often

abounds in an outcrop of fossil plants (An old photograph obtained through the courtesy of the late Professor B Sahni, F R S)

Fig 2 —*Enigmocarpon parijai* Sahni fruit photographed with reflected light (x 2 5)

Fig 3 —Three *Sahnianthus parijai* Shukla flowers enlarged from Fig 4 The specimen in the bottom left corner is a complete section through the outer hypanthium tube and central ovary with placenta and also the ovules The middle flower shows the ovary cut longitudinally in the lower region and at least half a dozen well preserved anthers, showing dehiscense in the upper region of the hypanthium tube (x 18)

Fig 4 —Section through an exceptionally rich chert showing one *Enigmocarpon* fruit and (S) several *Sahnianthus* flowers cut variously (x 3 5)

Fig 5 —A well preserved *Rodeites dakshini* Sahni sporocarp photographed in reflected light The dark round bodies are the megaspores with a mass of numerous microspores in between (x 2 5)

Fig 6 —A well preserved complete section through *Etapteris scotti* (x 20)

Fig 7 —A collection of several *Enigmocarpon* fruits occurring in natural form in the chert (x 1 5)

Fig 8 —*Rodeites dakshini* Sahni Enlargement through a portion of Fig 5 showing three large megaspores, numerous microspores with wall sculpturing and triradiate mark preserved In the centre may be seen a part of the vegetative tissue on which the mega—and microsporangia were borne (x 30)

Fig 9 —*Shuklanthus superbum* Verma showing nearly half a dozen flowers cut longitudinally in the upper region and almost the same number cut transversely in the lower part of the inflorescence (x 1 5)

Fig 10 —*Tricoccites trigonum*, the monocot fruit with three seeds and chambered wall The section in the present specimen has passed through two seeds (x 1 5)

Fig 11 —*Ptilophyllum cutchense* from the Jurassic beds of Rajmahal Hills, India (x 1 5)

(All the photographs except No 1 from Dr V B Shukla collection)

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Snakes in Nature and in Museum

By

Rev Zacharias "Vishahari"

IN the cosmogony of nature, snakes emerged during the permian period and have survived to our own day They belong to one of the reptilian class, which is familiar to everybody, and yet snakes are the most curious and least understood of them all Throughout the ages snakes have been a strange fascination for man Each religious or secular literature, and the tradition of every tribe of all countries have a variety of views, stories, facts and fictions concerning snakes The stories of "Ashta-nāgas, of Jeemutavāhana, of Kaliyamardanam (by Srī Krishna), of Śheshanāga (on whose head the world is said to be resting)," and the myths of "Hercules, Apollo and Aesculapius" and of so many others are well-known even to the present day Representations of snakes with human head and reptilian body and of many-headed snakes are still popular

The power of some snakes to inflict the cruel teeth of death upon anyone, may be the main reason why people look askance at them This has considerably marred an enchanting, scientific study of the rich, splendid snake-*fauna* The fear and dread among some tribes was so great that it resulted in the worshipping of the snake (for example, the Nāga-panchami) in order to appease the dreaded creature Some people consider it to be a deity of evil, others imagine it to be the attendant of some principal deities

In the middle ages people associated snakes with black magic and with evil spirits Even in our own days some believe them to be guarding treasures in caves or in strange places, or in the depths of the sea Mountains, rivers, towns and tribes have been named after snakes A hill in Kerala is called "Pāmboorāmpāra (which means rocks of creeping snakes)" In South America there is the "Snake-River" Palestine has a town called "Beth-Shān (house of Snakes)" The name of our own city "Nagpur" means the city of snakes Perhaps in the early days of this city snakes might have been swarming about the place! A certain tribe in the Rocky mountains is called the "Snakes" "Mal" is the snake-catching tribe of Bengal, and the "Sangis" (in Bengal) and the "Kakala" (in Kerala) are the professional snake-charmers The old Egyptian royal family used to wear the symbol of a Cobra-hood on their forehead Snakes form an essential symbol of the emblems of the old Maya and Mohenjadaro civilisation, of Kundalini Yoga, and of many medical societies The coat of arms of the Nagpur University and of the Daily "Nagpur Times" have been earmarked with snakes

The word " Snake " has its origin in the Anglo-Saxon word "Snaca" and the etymology of " serpent " points to the Latin word " Serpens ", which means creeping The more general word applied to snakes and other crawling creatures is " Reptile ", which has its root in the Latin word "repo" which indicates that the mode of locomotion is crawling The Greek word " Ophidia " is rarely used with an English ending " Ophidian " The word " Cobra " in Portugese means a "snake" The oldest word for snakes in the Devanāgari languages is probably " Nāga " Equally ancient is the Sanskrit word " sarpa " which has a close etymological relation with the Latin word "serpens", and

with the Hebrew word "sārap" meaning fiery (the fiery snakes of the Old Testament cf Num 21 6)

Paleontology claims that snakes are contemporaries of birds and that they began to exist about 200 million years ago But the fossils we have so far obtained *Laophis*, *Palæophis*, etc, date back only 80 million years The huge Pythons and Boas of our days are the surviving representatives of those ancient species Modern world, by the scientific study of our forerunners like John Ray, Linneus, Lawrenti, Dumeril, Bibron, Gray and so many others have so far identified more than 2,500 existing species These are widely distributed round the globe with the exception of Iceland, New Zealand and the region of extreme cold

Snakes exhibit a variety of habits There are the arboreal forms which have slender elongated bodies The terrestrial ones have all sorts of shape, size and colour of bodies Those subterranean species are of small stature having blunt tails, and the aquatic species have the special mechanism of valves in their nostrils

India has been generously gifted with snakes About 400 species have been so far identified Eighty of these have fangs and deadly poison Thirty of them are sea-snakes (Hydrophinae) The most common and fatally poisonous ones are the Cobra (*Naia Naia* or *Naia tripudianus*), the Krait (*Bangrus cæruleus*), the Russell's Viper (*Daboia or Chained Viper*) and the saw-scaled Viper (*Echis Carinata* or *Phoorsa*) These take an annual toll of 20 to 25 thousand lives in India Sixty per cent of these deaths are caused by the Cobra-bite The minimum lethal dose of Cobra venom for a man is 12 mgm , and usually a Cobra has about fifteen lethal doses of poison in its glands The Russell's Viper, the Krait and the Echis can eject 0 15 gm , 0 022 gm , 0 0046 gm venom at one bite, and the minimum lethal dose for a man is 15 mgm , 6 mgm and 8 mgm , respectively The snake-poison, though fatal to man, is of great benefit to humanity in the alleviation of human suffering, when properly handled by medical men—for instance in arresting Hæmophilia and Cancer and as a potent but dangerous anæsthetic

The majority of snakes are oviparous The *Viperidæ*, certain green snakes and the *Hydrophinæ* are viviparous As many as ten to a hundred and fifty young ones are produced in a single breed The gestation or the incubation period varies according to the species For instance, the Cobra lays 20 to 45 eggs in one brood and keeps watch for 56 days for the younglings to be hatched out The common-water snake (*Tropidonotus piscator*) lays 25 to 90 eggs and buries them in sand where moist heat is available The time required to get these eggs hatched out is 46 days Some time back I witnessed the whole process of development in a brood of 28 eggs The Python lays about 100 eggs and it actually incubates them for 50 days or more The Copperhead (*Ancistrodon Contortrix*) may bring forth as many as 142 or more in a single breeding season

Snakes' eggs, soon after they are laid, enlarge by one-third of their original size These eggs are pale in colour, oblong in shape and the shell is malleable in quality When the embryo is fully developed in the egg and is ready to get out, it breaks open the shell by means of a temporary egg-tooth Usually the new-born is one-sixth the size of its mother. The baby snake is as furious and as poisonous as its mother, and has the natural instinct to fend for itself

A snake's capability to gulp down items of prey that are three times the size of its own head deserves our special attention The mouth of the snake can be opened up to 180° Besides, all the jaw-bones are loosely connected in order to facilitate greater expansion The "Eyerverter" of Africa, whose body is not thicker than a man's finger, easily swallows a hen's egg One of the American Bull snake has been credited to have shown the magical performance of feasting upon fourteen eggs in succession Pythons have devoured dogs, goats, pigs and even deer Cannibalism is a common thing among snakes The king Cobra's (*Naia hannah's*) stable food is snakes The same can be said of the American King snake Once two Pythons in captivity seized one Pigeon from both ends Neither would yield to the

other, and consequently the slightly bigger one swallowed the pigeon as well as its nine-foot brother!

All except fur and feather is digested in the stomach The snake, so richly nourished, never stops growing The new-born doubles its size during the first year This speed of growth continues for two or three years (until puberty) After that growth is slow, but the snake never stops growing, if it is healthy and gets enough food

We do not know exactly how many years a snake would live on in its natural habitat, if its enemies do not cross its way Mythological idea is that they live to be 1,000 years old Some of the Ayurvedic texts would put their maximum age at 120 years But we have few reliable information regarding the age of some species that were kept in captivity The King Cobra has lived to be 26, the Python 19, the Cobra 17, the Russell's Viper 16, the Krait 14 and the Saw-scaled Viper 13 Generally speaking snakes do not survive over a period of thirty years

Although some people would not injure a snake, it is correct to say that man is the "Yama" of snakes For man avenges the death of his fellowmen, caused by snake-bite, by hunting down an estimated 1,000,000 snakes every year The mongoose, the civet-cat and the wild-boar put an end to a great number of snake-fauna It has been already mentioned that many of the snakes themselves are a deadly foe to their own family

Most of the predatory birds like the Secretary-bird, the Adjutant-bird, the peacock, the chaperal-cock, eagles and kites are formidable enemies of snakes The sea-snakes are a delicacy for rapacious fishes Taking into consideration all these factors we may rightly conjecture that after a few decades of years many a variety or species of snakes will become extinct It is here where the museums and zoos step forward to preserve this beautiful and precious wealth of nature for posterity

It would not be doing justice, if we forgot what Mr D'Abreu (Superintendent of Nagpur Museum, 1911 to 1937) has done in this connection He scrapped the old collections and replaced them with fresh specimens "The section grew faster than cases and accommodation were available" says an old newspaper report, and it grew "to thrice its original dimensions" He has listed (in his booklet "Reptiles of the Central Provinces") 31 species that were found in Nagpur and in the surrounding districts, and he collected 26 species and represented them with a total of 122 specimens His book on "The Snakes of Nagpur" is a monumental work with regard to its treatment of the subject—accurate and scientific yet thoroughly adapted to the interest and understanding of the common people

The most valuable and extensive collection of snakes in the world is in the British Museum The various specimens of snakes are treated in detail in their catalogue The Bombay Natural History Society has a wide variety of preserved specimens The Zoo of Mysore, of Trichur and of Trivandrum have a good number of live specimens Haffkine Institute, Bombay, has (although not of many different species) the greatest number of snakes (over 2,000 in all) kept alive in India

There are many other aspects concerning the snakes to be dealt with for instance 'how to identify the species', 'treatment of snake-bite', 'snakes in fact and fiction' and so on But an article of this kind could not do fair justice to all the various topics, and if I dared do so, it would only be out of place In short we should bear in mind that the snake with whom we share the adventure of life is an integral part of the economy of nature, and that it has its own part to play in her various schemes

For Further Reading on Snakes—

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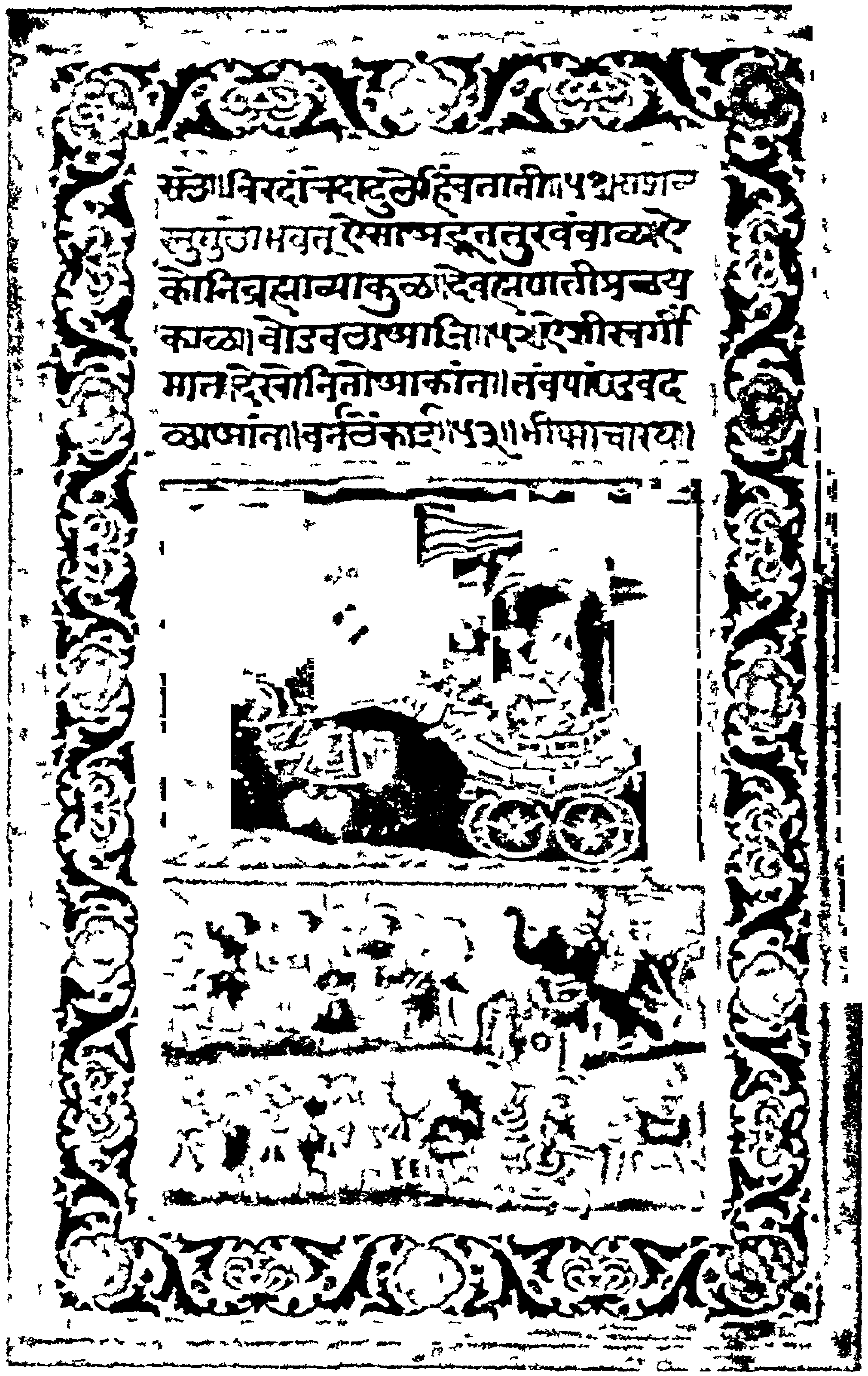
PLATE D

Vatapatrasayi / Seshasayi



Bhishma in his chariot

Illustration from Jñāneśvarī

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A 2313—13 A

Collection of Pre-Historic Antiquities in the Central Museum, Nagpur

By

Moreshwar G Dikshit, Nagpur

THE Central Museum, Nagpur, is celebrating its centenary in 1964 As a tribute to the services it has rendered to the cause of education during the last century, it is proposed to give a detailed account of the pre-historic material it exhibits and stores, which is rich, varied and representative in character In presenting this study I have largely drawn upon the help rendered by the staff of the Museum and especially Shri V P Rode, M A, Curator, for his manifold courtesies I have to thank the organizers of the Centenary Celebration Committee for giving me this opportunity to study the material at first hand, some of which is reported *in extenso* for the first time

The Pre-historic material in the Museum can broadly be divided into the following groups —

1 Palaeolithic and Middle Stone Age tools—

(*a*) From Nagpur and Bhandara districts,

(*b*) From the collection made by Dr De Terra and Paterson in the vicinity of Hoshangabad for the Yale Cambridge Expedition, 1935

2 Hoard of copper celts and silver ornaments from Gungeria, district Balaghat, M P, found in 1870,

3 Copper celts from Kesli, district Saugar, M P (1911), and

4 Microliths and other artefacts from Pachmarhi, M P, excavated by Dr Hunter, in 1936-37

* * * *

Ancient Vidarbha, the region in which Nagpur is situated, is known to have yielded pre-historic antiquities since the early days of the pioneers like Hislop, Rivett-Carnac, both antiquaries of repute who have played a significant role in the founding of the Nagpur Museum Stone artefacts were reported from time to time by the officers of the Geological Survey of India, from Khair, Parsora and Dhoki in the Yeotmal and Chanda districts, in 1800 In 1867 Major Pearse is reported to have excavaed two stone circles at Vadagaon, about 2 miles teast of Kamptee, and Rivett-Carnac[1] is known to have found many iron implements and megalithic pottery in the stone circles at Junapani, near Nagpur, in 1867 Rev Hislop met his accidental death while busy excavating one of the megalithic burials near Nagpur in 1864 In spite of these early notices, systematic search for pre-historic artefacts may truly be said to have begun only recently In 1959-60, the Archæological Survey of India, through its Pre-history Branch, explored some sites like Koradih, near Nagpur, Khaira on the Wuna river in the Nagpur district and some tracts on the Wardha river were also surveyed for similar material (*Indian Archaeology*, a Review, for 1959-60, pp 31—33, Figs 12-13 and Pls XXXII-XXXIII, See also *ibid*, for 1960-61, pp 22—25, Figs 7-8) Two megalithic stone circles were further excavated at Junapani in the year 1962-63 Most of the material found by the Survey is in the Indian Museum, Calcutta, and in the custody of the

[1] JR,ASB,Vol XLVIII (1879), pp 1—16

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Pre-history and Excavation Branches of the Survey at Nagpur where it is being studied

The Nagpur Museum contains only a few tools which belong to the region One of them is a small pebble tool bi-face hand-axe, on a brown-veined quartzite It was recovered by Mr E A D'Abreu, in 1926, from near a lake at Navegaon, in the Bhandara district It measures about 13 cms by 8 cms The primary flaking is done on one side only while the second face shows secondary retouches in small scars at the edges Alternate flaking is resorted to on the sides and the specimen is considerably rolled

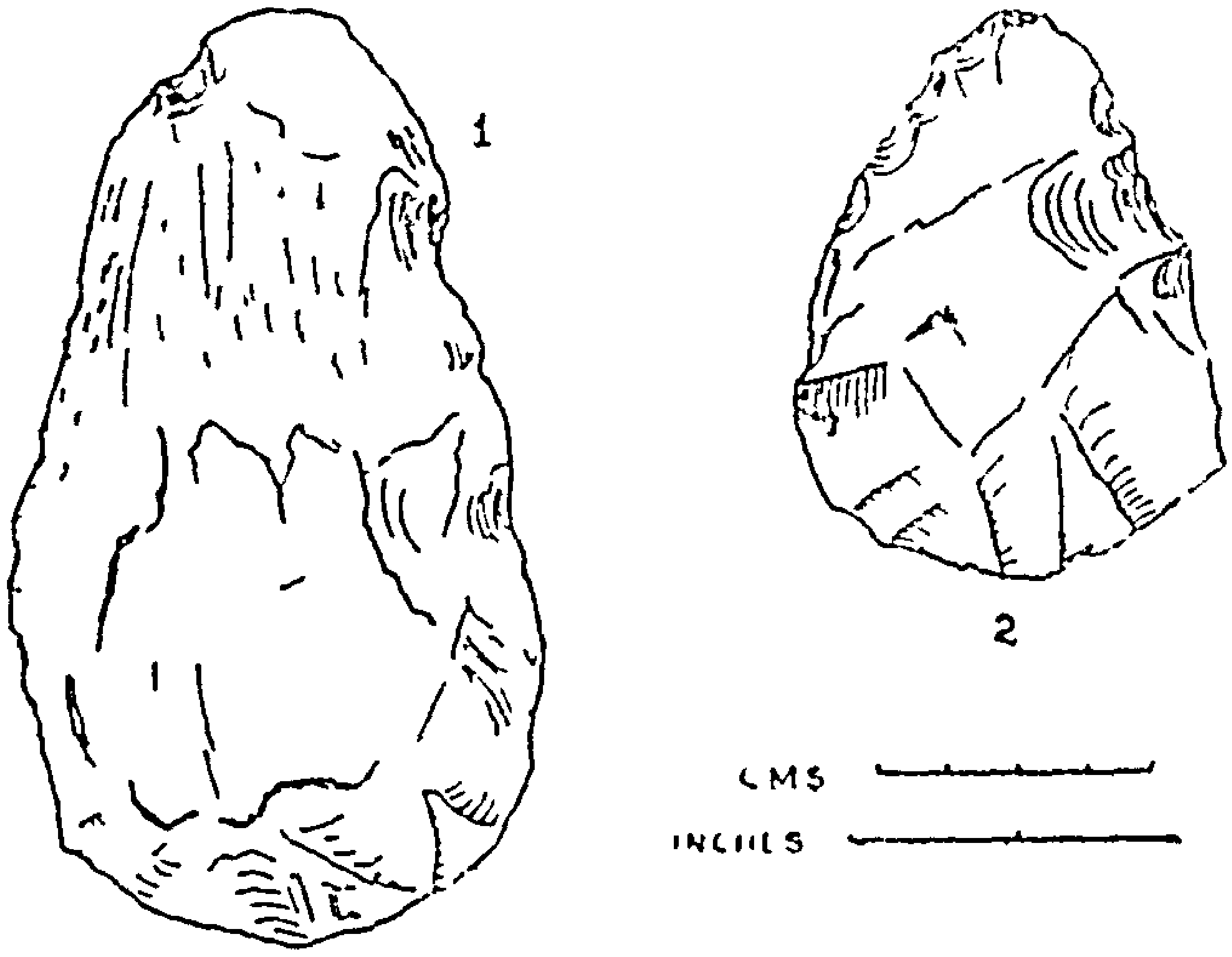


FIG 2 —No 1 Hand-axe from Navegaon No 2 Series II tool from Kalmeshwar

The other three specimens from the Nagpur district are artefacts collected from cairn No 2, at Kalmeshwar, on the Nagpur-Katol Road, about 12 miles West of Nagpur All of them are diminutive tools belonging to Series II, and are of unusual interest since they were collected as early as 1938 when such tools were not recognised as such in the lithic industries of India No 15 is a miniature hand-axe made on a flake, from a yellow-brown quartzite The primary working shows a mild bulb of percussion and the tool is worked at the edges by alternate flaking on both sides No 11 is a side-scraper of chert, with a sharp-cutting edge on a medium-sized flake The edge shows signs of use and is retouched in several places No 24 is another side-scraper of chert similarly retouched at the periphery in large bulbous scars No 23 collected from the same assemblage, is a well-worked point on a bulbous flake, with secondary retouches at the edge The sharp end of the point is broken at the tip

1 Tools from Hoshangabad

The second group comprises about 30 stone artefacts collected in and around Hoshangabad in November 1935 by Messrs De Terra and Paterson, for the Yale Cambridge Expedition All the lithic tools recovered by this expedition were divided equally between the Peabody Museum of Natural History Yale University, the Cambridge University and the Archæological Survey of India In August 1938, the Indian Museum, Calcutta, sent to the Central Museum, Nagpur, a representative collection of 30 tools which are studied here

The stratigraphy of these tools and their typology has been studied by Messrs De Terra and Paterson in their Report on *Studies in the Ice Age in India and Associated Human Cultures*, pp 313—326 On account of the rolled condition of many of the tools, Dr Paterson thought that drawings of these were not necessary (*ibid*, p 321) and only six were illustrated by photographs on Plate XXXII

Ever since the discovery of palæolithic tools in association with mammalian bones was first made at Bhutara, near Narsinhpur, in 1873, the Narmada basin has been a veritable source of valuable information both the Palæontologist and the Palæobotanist alike The Pleistocene geology of the region was studied as early as 1860 by W Theobald and in 1905 by Pilgrim In 1881, a human cranium is said to have been found amongst the basal conglomerate beds, but this specimen was subsequently lost sight of In 1935 the work of Dr De Terra and Paterson themselves brought to light a number of mammalian bones like that of *Bos Namadicus*, *Bubalus palaeindicus* and the *Elephas namadicus*, and furthermore they found a number of artefacts in association with these bones which gave them the necessary environmental setting, which was hitherto lacking in most of the Indian specimens The work of Dr De Terra and Paterson was continued and is still likely to be continued in the near future for the basic conclusions they arrived at in respect of the flora and fauna of the Narmada region The names of Dr H D Sankalia, Dr R V Joshi, Dr. K D Banerjee and that of Dr A P Khatri may be mentioned in this connection, occasionally supplemented by enthusiasts like Shri M L Mishra of the Benaras Hindu University who have reported about stray finds in the region

In spite of the large data left by the Yale Cambridge Expedition, it was surprising that only a few artefacts collected by them should have been published (see however Sounderrajan, Quaternary pebble, core and flake cultures of India, *Ancient India*, No 17, Appendix III, illustrating the typical Sohan tools Pls XXXII—XXXVI)

Opportunity is therefore taken here to describe and illustrate the stone-age tools collected by the Yale Cambridge Expedition, from the share received by the Central Museum, Nagpur The tools are described here for the first time and the line-drawings illustrating a few select specimens are by the author of this paper [Figs 3 & 4]

The Pleistocene alluvium of the Narmada and its tributaries was studied by the Expedition at eleven different localities, and specimens from the following are recorded here —

Locality 3 (Seven tools Nos 1—7)—

At Hoshangabad, on the Narmada, just near the main bathing ghat, from a gravel conglomerate

Locality 4 (Two tools . Nos 8-9)—

Near Hoshangabad, on the right bank of the Narmada, a little below the rail-road bridge

Locality 5 (Five tools Nos 10—14)—

From Adamgarh, well-known for its rock-shelters, 2 miles south of Hoshangabad, mostly collected from re-washed laterite beds near the quarries

Locality 6 (Three tools · Nos 15—17)—

Upstream of the Narmada from its confluence with the Tawa river, Tools recovered from red clays about 60 ft. below the surface

Locality 8 (Five tools Nos 18—23)—

At Umaria, on the Narmada, about 7½ miles N E of Narsinhpur, below the prominent bluffs near the village and at the confluence of the Umar river

Locality 9 (Four tools Nos 24—27)—

On the left bank of Narmada, 1 mile below its confluence with the Umar river, from a ledge which also yielded bones of *Bos Namadicus*, *Elephas Namadicus*, etc

Locality 10 (Three tools Nos 28—30)—

Near Barmahn (Barman) Ghat Early tools in the stream bed and in upper group from indurated sands

The total number of artefacts collected from each locality is not known but from the descriptions of these recorded in the text there is room to believe that the proportion of such tools from the Narmada region was comparatively smaller than the tools in other parts of India like the Siwaliks and the Potwar region The Indian Museum, Calcutta, retains the most important

[1] For these localities see the sketch-map (Fig 183) in De Terra and Paterson, *Studies on the Ice Age in India and Associated Human Cultures* (Washington, 1939) Figs 184—191 illustrate the stratigraphical horizon of the tools collected

specimens from the localities concerned and only a proportion of the share was allotted to the Central Museum, Nagpur The collection how ever is thoroughly representative in character The tools are in most instances of quartzite, only two amongst them being in trap The condition of the tools in many instances is rolled, and in cases where these have been extricated from a gravel conglomerate a few retain some patches of Kankar on the specimens The serial numbers, used in describing the tools, are written on small slips pasted on the specimens themselves when received from the Indian Museum, Calcutta Important data regarding the locus, the horizon and other associations, if any, is written in Indian ink on each specimen probably when they were being studied by their discoverers and has been of immense use Such remarks as "*in situ*", "*from upper gravel*", "*with Bos*" "*re-washed from the lower gravel*" have helped immensely in identifying these tools to their proper place in Dr De Terra's description

These may be described as follows —

Nos 1—7 Tools collected by De Terra and Dr Teilhard from the hard cemented gravel conglomerate The tools were found *in situ* from where four Abbevillian hand-axes and an equal number of flakes with high-angled platforms are reported

Cf De Terra, *op cit*, Fig 184 and Plate XXX, 2

No 1 Material Quartzite Condition Much rolled

Flake-tool with a prominent bulb of percussion Having a high-angled platform Worked at the edges with slight retouches here and there A bold scar on the front face

Locus Locality 3, found *in situ* in gravel conglomerate

No 2 Material Quartzite Condition · Slightly rolled

Flake-tool with a high platform and S-shaped twist Secondary retouches at the edges in front, the reverse unworked showing a bulb of percussion Retains original gravel patches

Locus Locality 3, found *in situ* in gravel conglomerate

No 3 Material Quartzite Condition: Highly rolled

Discoid with large flake scars and worked with alternate flaking at the edges. heavily rolled

Locus Locality 3, found *in situ* as above.

No 4 Material Quartzite Condition Fresh.

A fine flake with much of the cortex remaining Upper surface shows deep secondary working to form a point which is broken away Side scraper-*cum*-point

Locus Same as above, found *in situ* in the gravel

No 5 Material Quartzite Condition Fresh (Not Illustrated)

A flake with negative bulbular back worked to a point by alternate flaking, Chopper

Locus Locality 3, near Hoshangabad as above, found *in situ*

No 6 Material Quartzite. Condition Fresh (Not Illustrated)

A miniature flake with a bulb of percussion, worked with alternate flaking to produce a sharp point Traces of gravel patch

Locus Locality 3, as above, found *in situ*

No 7 Material Quartzite. Condition Fresh (Not Illustrated)

A miniature core-tool with cortex The underside worked with two bald scars to form a point

Locus Locality 3, near Hoshangabad as above, found *in situ* in gravel conglomerate Probably represents only the raw material

Nos. 8-9 Artefacts recovered from the junction of the Tawa and the Narmada,

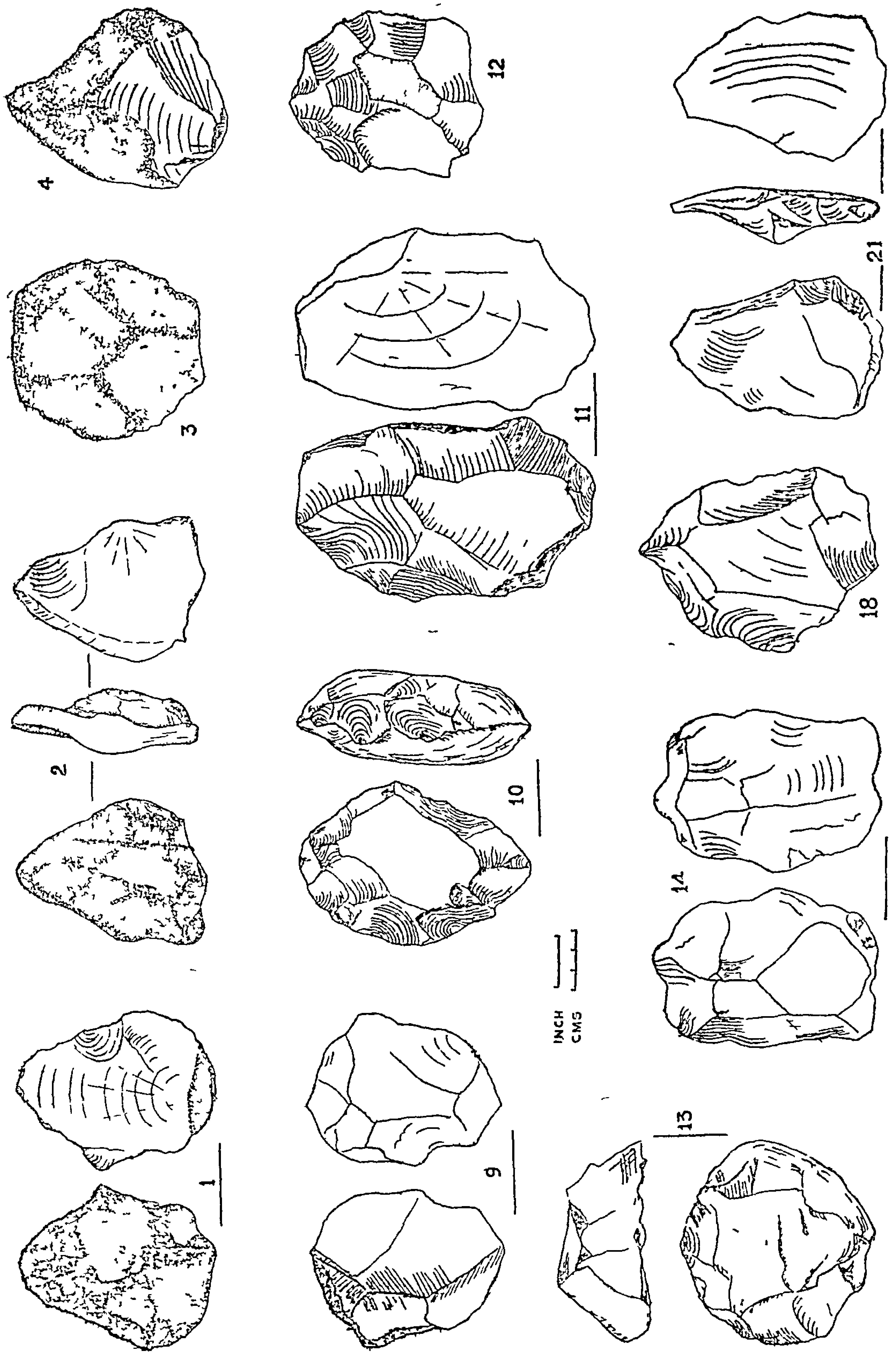
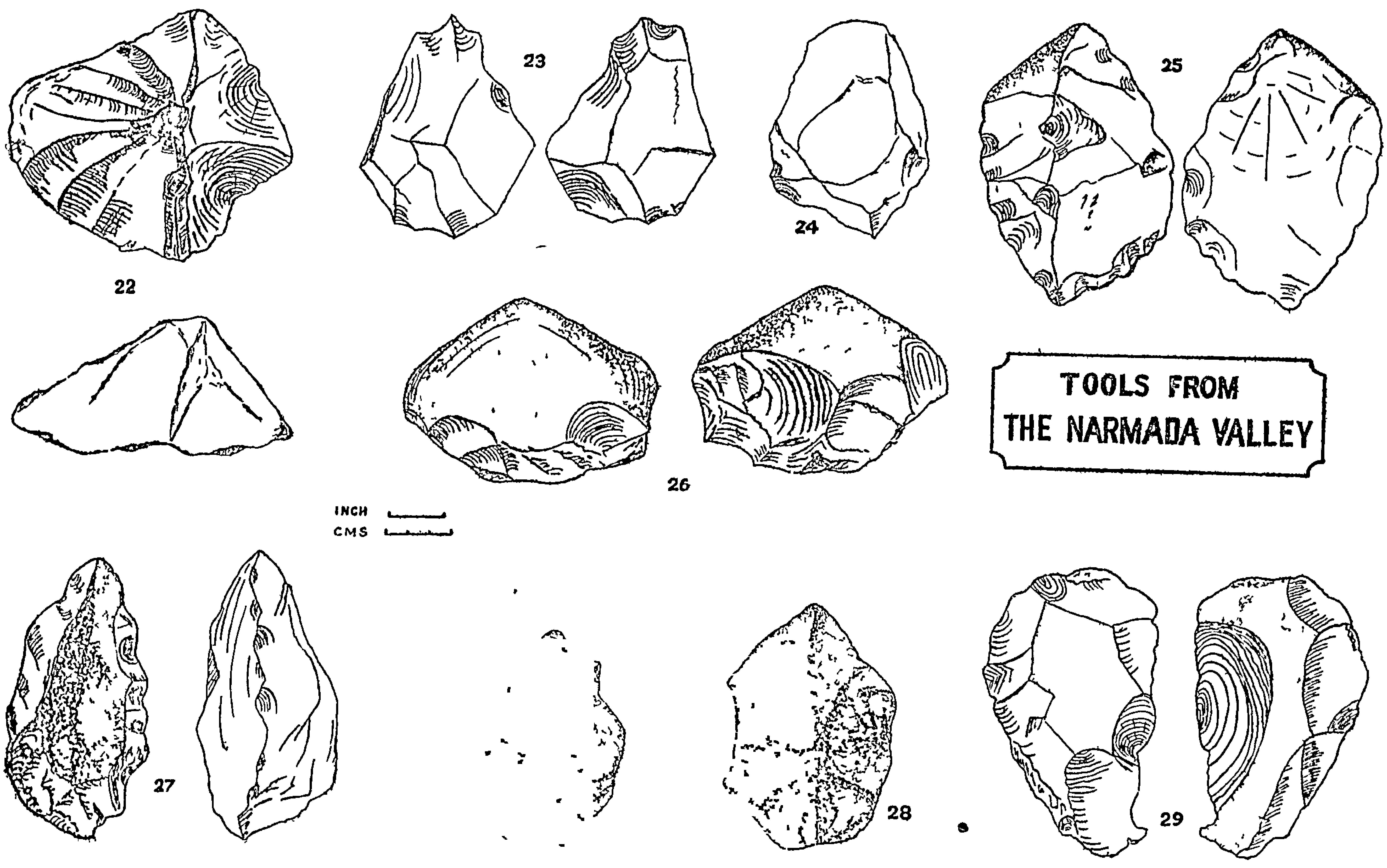


FIG 3



Dr De Terra's Collection (*Nos*, 1—4, 9—14, 18, 21—29)

FIG 4

near the Railway bridge, about 60 ft below the present surface Near Hoshangabad Cf De Terra, *op cit*, Fig 185

No 8 Material Quartzite Condition Slightly rolled

A fine scraper with much of the cortex remaining Prominent bulb of percussion on the underside and a deep flake scar on the upper face, probably used as an end-scraper

Locus Junction of Tawa and Narmada Collected from loose gravel

No 9. Material Quartzite Condition Fresh-looking

Discoid very carefully worked by alternate flaking on the edges and some secondary retouches on the underside. A fine pebble tool

Locus Same as No 8 above Probably from the upper gravels

The lower basal conglomerate beds here yielded a jaw fragment of Hippopotamus and single teeth of *Bos* On account of its easy accessibility this region seems to have been tapped by various other scholars also Cf M L Mishra, " On some stone implements from Hoshangabad, *Proc of the Indian Academy of Sciences*, Vol X (Oct 1939), pp 275—285, and subsequent work of Dr A P Khatri, in the same region

Nos. 10—14 These tools were collected near a large quartzite hill called Adamgarh, about 2 miles south of Hoshangabad Cf De Terra, *op cit*, 186 The hills are better known for the rock shelters with primitive paintings, particularly for the supposed representation of a giraffe amongst them [cf E A D' Abreu The Rock Paintings at Hoshangabad, *Nagpur Museum Bulletin* No 2 (1934)]

The implements were obtained from the re-washed laterite which has withered away and settled near some of the rock-shelters An assemblage of three Abbevillian-like crude hand-axes, a large flake with edge trimmings, one chopper of Early Soan Type, a number of discoids, etc, were collected from this locality and led Dr De Terra to conclude that the tools do not speak in favour of any great age to the rock-shelters nearby Subsequent work of Dr R V Joshi, at the same site, in 1961, yielded important results relating to the stratigraphy of the region but with no significant clues relating to the authorship of the paintings in the rock-shelters (cf *Indian Archaeology*, a review for 1960-61, p 13, Figs 2—4 and Pls XX—XXIII) See *supra*, pp 114-115

No 10 Material Quartzite Condition Fresh
A fine chopping tool with a deep step-flaking and secondary retouches at edges by alternate flaking Core-tool

Locus Near Adamgarh quarry

No 11 Material Quartzite Condition Fresh
A cleaver on flake with high platform and with large flakes removed by alternate flaking
Locus Near Adamgarh quarry

No 12 Material Quartzite Condition Fresh
A discoid, on thick flake with high striking platform and a number of edge trimmings
Locus Adamgarh as above

No 13 Material Quartzite Condition Fresh
A fine discoid with a concave underface and numerous edge-trimmings Early Sohan
Locus Adamgarh as above

No 14 Material Quartzite Condition Fresh
A fine chopper-chopping tool with clean broad facets and a high striking platform, alternately flaked to form a point at one end

Locus Adamgarh as above

Nos. 15—17 Three small pebble tools (Series II ?) collected from Locality 6, upstream from the junction of Tawa and Narmada The tools were found in the river bed, in a horizon indicating the

upper limit of the Acheulian These are not illustrated

No 15 Material Quartzite Condition Fresh Core-tool, probably a side-scraper, with cortex, secondary working at the edges in alternate flaking to form a curved edge

Locus Locality 6, found *in situ* in river bed

No 16 Material Quartzite Condition Fresh Core-tool, probably a point, with cortex, secondary flaking to form a point

Locus Same as above, found *in situ* in river bed

No 17 Material Quartzite Condition Slightly rolled

Tool, on thick flake, with cortex and high working platform and slight trimmings at edges

Locus Same as above, found *in situ* in the river bed

Nos. 18—23 These six artefacts were collected from near the sandstone bluffs below the village Umaria, where large skulls of *Bos Namadicus*, teeth of *Elephas Namadicus*, etc, were obtained The tools obtained from this and the subsequent locality (Nos 8-9) constitute the major bulk of the finer class of implements preserved in the Nagpur Museum Cf De Terra, *op cit*, Fig 188.

No 18 Material Quartzite Condition Slightly rolled

A fine chopping tool, a discoid, with broad facies, treated with step flaking

Locus Umaria Bluffs From upper gravels but probably re-washed from the lower beds

No 19 Material Quartzite Condition Fresh A Miniature pebble tool mostly cortex only, with edges trimmed alternately to form a small chopping tool, with secondary retouches

Locus Umaria Bluffs From upper gravel

No 20 Material Quartzite Condition Fresh-looking with Kankar patches

Small core-tool, alternately flaked to form a side-scraper

Locus Umaria Bluffs Found *in situ* in upper gravel

No 21 Material Quartzite Condition Fresh A small Clactonian flake, with a bulb of percussion and steep retouches on the face

Locus Same as above Found *in situ* in upper gravel

No 22 Material Quartzite Condition Slightly rolled

An unusual type of chopping tool, with high flake scars removed from top, very steeply cut, prominent bulb of percussion at the base

Locus Umaria Bluffs Collected from the upper gravels but probably washed from the lower gravels

No 23 Material Quartzite Condition Fresh but painted with white gravelly patches

A fine chopper, with broad clean facies, with a high striking platform and alternate flakings to form a point at the lower edge

Locus Umaria Bluffs Found *in situ* in upper gravel

Nos. 24—27 These four tools, the finest of the series in the Museum, were collected from the left bank of the Narmada, about 1 mile below its confluence with the Umer river They have an unusual interest because they were collected from a horizon which has yielded large bones of *Bos Namadicus*, *Elephas Namadicus*, etc, some of them from very near the Mammalians found Cf De Terra, *op cit*, Fig 189

No 24 Material Bicoloured pink and reddish Quartzite Condition Fresh Clactonian-like flake, with a high

striking platform and secondary retouches at the periphery

Locus Locality 9, near Narsinhpur-Umaria, found *in situ* on the eroded bank

No 25 Material Quartzite Condition Heavily rolled

Cleaver, on a flake, with a serrated ridge formed by alternate flaking High striking platform with some cortex left at top

Locus Locality 9, near Narsinhpur-Umaria The tool was actually found near the large horn-cores of *Bos Namadicus*, recovered from the edge about 40 feet above the stream-bed

No 26 Material Veined Quartzite Condition Fresh-looking

A fine chopper-chopping tool, on a core pebble with cortex at top and steep alternate flakes to form a sharp-cutting edge

Locus Locality 9, as above From Brownish clay

No 27 Material Quartzite Condition Fresh

A fine Abbevillian hand-axe, steep sides, treated with step-flaking and alternate strokes to produce a very pointed edge

Locus Locality 9, as above Found in the lower gravel

[illegible] These three tools were collected from Locality 10, near Burman Ghat, on the Narmada, where the river cuts into trap and quartzite These are from the horizon of indurated sand in the upper group, and are in rolled condition

No 28 Material Quartzite Condition Heavily rolled

A Discoid, with bold flake scars and edge trimmings with alternate strokes

Locus Burman Ghat

No 29 Material Quartzite Condition: Slightly rolled

A Fine flake-tool, heavily worked on sides with bold scars in alternate flaking to form a curved edge turning into a beak Probably a side-scraper

Locus Burman Ghat

No 30 Material Trap Condition Very heavily rolled

Hand-axe on a flake, with broad flake scars and edge trimmings

Locus Burman Ghat

These tools are thoroughly representative of Pleistocene as observed in the Narmada Valley, and being a first systematic attempt to study the tool-types in the region, the collection has its own importance Besides giving the basic data, when Pre-history was little studied in India, the collection and the studies thereon have indeed afforded a great stimulus for further archæological work in the Narmada region As such the primary data supplied through the great work of Dr Terra and Paterson has its own pioneering value and one is really glad to have such an opportunity to describe a part of the collection made by Yale Cambridge Expedition In the present collection, material from some localities on the Narmada (Locality 1, 2, 7, 11—13) is missing, and as described already it is likely that only a portion of the whole collection is retained in India I also have to thank Dr R V Joshi, of the Archæological Survey of India, for many helpful suggestions in presenting this study and for saving me from possible errors in the detailed description of the specimens

2 The Gungeria Hoard

This hoard, comprising of 424 hammered implements of copper and 102 silver ornaments (?) was discovered in the village Gungeria, N Lat 22° 25′, East Long 80° 8′ about three miles from the Mau police outpost and about 36 miles N -W of Burha, in the Balaghat district It appears that two boys attending to cattle in that village saw a piece of metal imbedded in soil which was exposed accidentally. Out of curiosity the spot was excavated in

A 2313—14 B

full It appeared that these implements were laid in regular horizontal layers within a space of 3 ft × 3 ft and about 4 ft deep The silver objects formed a part of the hoard and lay in a compact mass by one side of the implements It is surmised that these articles, probably intended for the trade, were packed in a wooden box, which had decayed in course of time The hoard was buried for some unknown reason and there it lay till its discovery on 21st January 1870

This hoard of implements is acclaimed to be the largest hoard of its class and is interesting for a number of reasons Besides the normal types of 'flat' and 'splayed-end' celts, which are known from a number of sites in India, this hoard includes several implements which have been designated as 'Bar-celts' The latter type of implements are almost exclusive to the Gungeria site, though some simulating evidence is obtained from a specimen known from Rajpur, Dist Bijnor, in U P, and about 17 specimens from Hami in Bihar, Eastern India The occurrence of silver ornaments in association with the copper celts at Gungeria has some bearing on the chronology of this hoard The silver ornaments are in the shape of very thin concave discs, cut to shape from larger pieces of almost paper thickness and the most curious pieces are those shaped like a 'Bull's Head' with the horns drooping down

The Celts in the Gungeria Hoard are classified under two heads (1) Flat Celts, and (2) Shouldered or 'Splayed-end' Celts The former are substantial pieces of copper, sub-triangular in shape with a truncated rounded top, thickened sides and a straight or rounded cutting edge The average size of each implement varies from 16 to 17 cms in length, 4 to 5 8 cms at the top and 9 8 cms to 13 cms at the blade The thickness varies from 1 to 1 9 cms In weight they are found to vary between 1 Kilo to 1 92 Kilograms Each of the celt is hammered to shape by beating the metal and in fact no specimens are exactly identical with each other The cutting edges in some specimens appear to have been formed by bevelling from one side and only a few show any indications of use

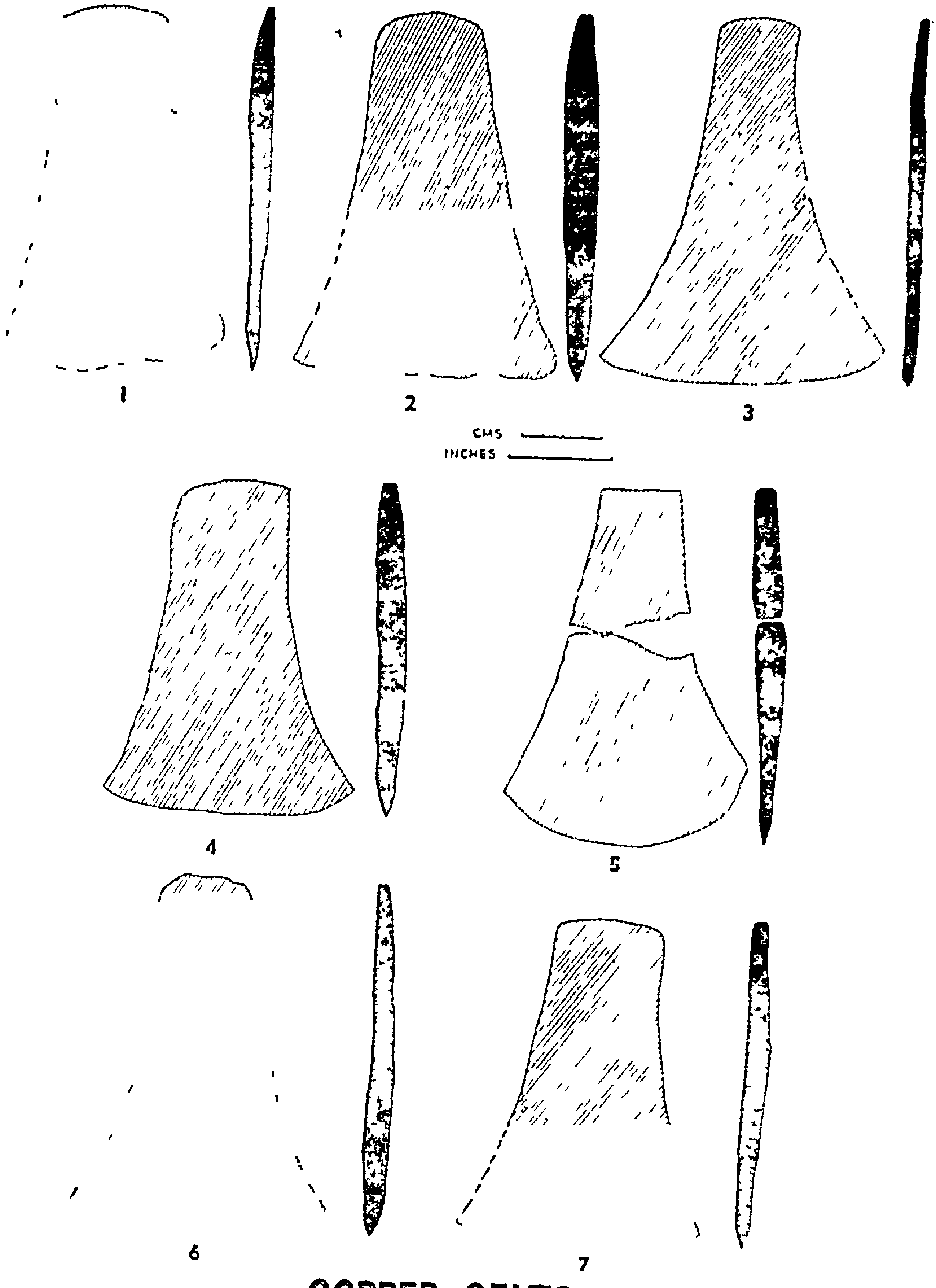
(2) Shouldered Celts These celts are characterised by a distinctive elliptical blade which take the shape of shoulders at sides In order to distinguish them from the celts with rectangular shoulders, found in Assam and Eastern India, Col Gordon prefers to designate them simply as "splayed-end" blades[1] The shape is common enough in Gangetic Valley sites but is not represented amongst specimens belonging to the Chalcolithic cultures in the Indus Valley and in the Deccan

(3) Bar Celts "A bar celt consists of a nearly parallel-sided bar, the length of which (sometimes up to 2 ft) measures several times its width It is rectangular in cross-section with a flat bottom and convex upper side The cutting edge is generally crescentic, fashioned by bevelling the upper side" The Gungeria hoard contained 90 pieces of this type and the other sites where longish bar celts are reported are (1) Rajpur in Bijnor district of Uttar Pradesh (one specimen) and (2) Hami, in Palamau district, where 17 bar celts were found But even in this type, the long sides of the bar are nearly parallel and not so tapering as in the Gungeria specimens The shape of the Gungeria bar celts should therefore be calculated as exclusive to the site

Regarding these bar celts Shri B B Lal has observed that most of the features in the copper specimens from Gungeria are found in the characteristic stone celts found in the hilly tracts of Southern Bihar, Western West Bengal and Northern Orissa In support of his claim he has illustrated one specimen from Ban Āshuriā (District Bankura, West Bengal) (*Ancient India*, No 7, Plate XI, A-B, and Fig 5 1-2) and contends that the metal copies were developed from the proto-types in stone Col Gordon, however, does not seem to agree with the comparison made by Shri Lal and points out that the stone celts of Eastern India differ in many respects from the Gungeria bar celts

The earliest notice of the Gungeria Hoard of copper implements is by Mr A Bloomfield, the then Deputy Commissioner of Balaghat, who reported about its discovery, while forwarding some representative specimens to the

[1]Gordon, *The Pre-historic Background of Indian Culture*, p 135



COPPER CELTS

FROM GUNGERIA (DIST BALAGHAT) M P

FIG 5

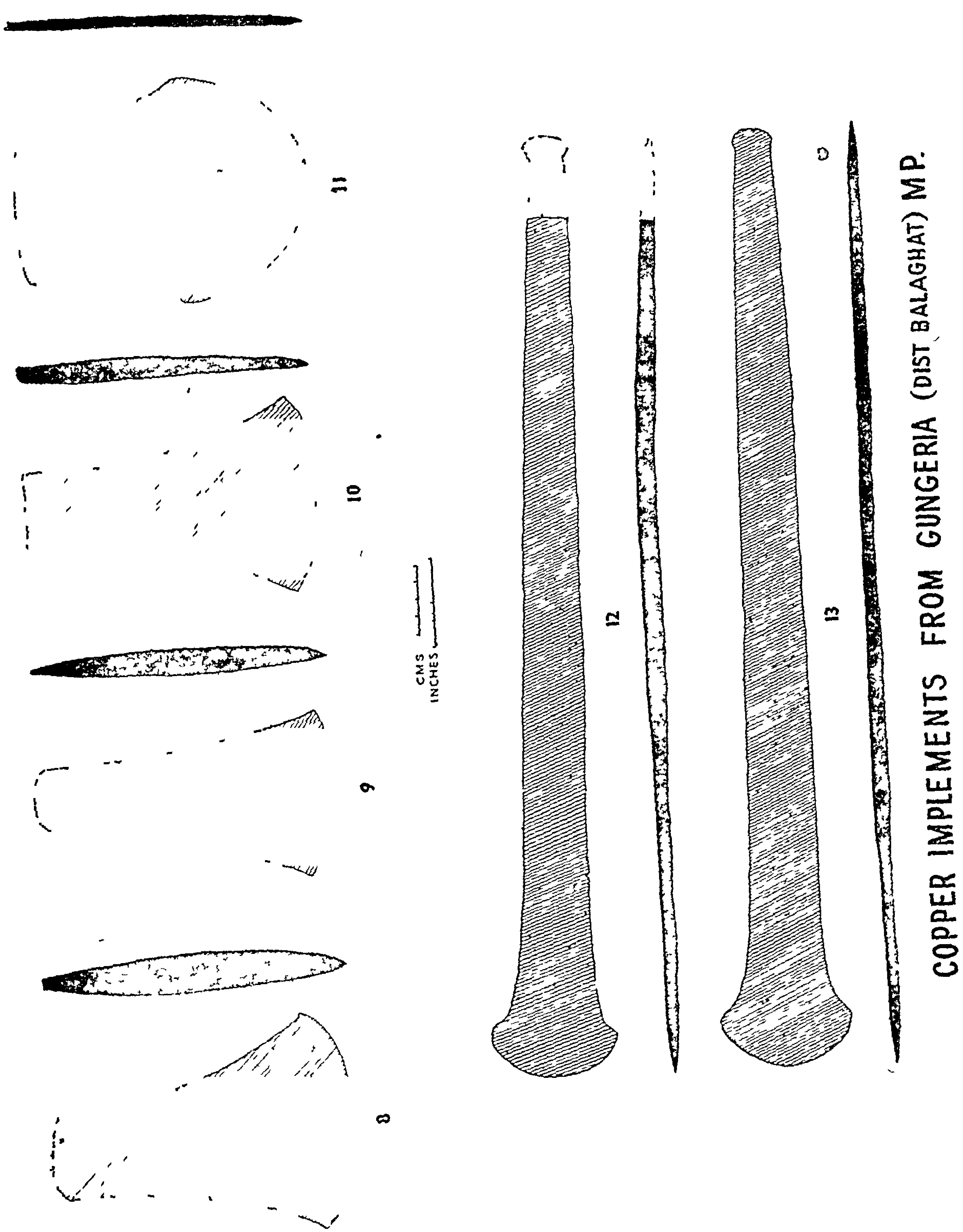

COPPER IMPLEMENTS FROM GUNGERIA (DIST BALAGHAT) M.P.
8
9
10
11
12
13
CMS
INCHES

FIG 6

Asiatic Society of Bengal in April 1870 Bloomfield's paper is published in the *Proceedings of the Asiatic Society of Bengal*, for May 1870, pp 132 ff Of this hoard 12 silver pieces and celts went to the Indian Museum, Calcutta These have been catalogued by Anderson in the *Catalogue of Antiquities in the Indian Museum*, Part II, under section Ga Recently Shri B B Lal has illustrated one bar celt from this collection (*Ancient India*, No 7, Pl XI, B) A large selection from this hoard was also sent to the British Museum, London, and has been commented upon by Mr Read in his *Guide to the Antiquities of the Bronze age in the British Museum* (1904), Pl VII and Fig 42, where 13 copper implements and 2 silver objects have been illustrated Few specimens (5 copper implements and 2 silver objects) which went to the National Museum, Dublin, have been illustrated by Dr V A Smith in his important paper on this subject "The Copper Age and Pre-historic Bronze Implements in India" published in *Indian Antiquary* (1905), XXXIV, pp 229—244 Vincent Smith has alluded to certain other specimens from this hoard being preserved in the National Museum, Edinburgh, but the exact number is not specified In view of the large number of objects in this hoard it is also likely that these were distributed in some other museums also but details regarding these are not forthcoming

Out of the hoard of 424 copper implements and 102 silver ornaments, the Nagpur Museum received 12 copper celts initially and only five silver ornaments (Nos 47 to 58 and 59—63)

These included 10 celts of the Flat Type and 2 bar celts and since the shouldered type of celt was not represented in the collection one celt of this type (No 80) was added subsequently as a permanent loan from the Mahant Ghasidas Memorial Museum, at Raipur The description of these objects may be tabulated as follows —

Museum No	Type	Length in Cms	Breadth at top in Cms	Breadth at Blade in Cms	Thickness in Cms	Weight in Lb	oz
47	Flat celt	17	5 8	12 8	1 9	3	4
48	Do	18	5 5	13	1 5	3	7
49	Do	17	4	9 8	1 7	2	5½
50	Do	18	4 2	14	1	1	15
51	Do	17 4	5	12 7	1 7	3	10
52	Do	18 3	4 7	13	1 5	2	12
53	Do	17 5	5 5	11 3	1	2	3½
54	Do	16 3	4 6	10 8	1 3	2	2½
55	Do	16 7	5 6	12 3	1 6	2	10
56	(Broken)	17	4	12	1 6	2	13½
57	Bar celt	53	2 3	7 5	8	3	1
58	Bar celt (Slightly broken)	49	2 3	7 1	1	3	2
80	Shouldered celt (Raipur Museum)	16 7	13		0 5	1	¼

The silver ornaments, 102 in number, from the Gungeria hoard consisted of extremely thin discs, almost paper-like in thickness and represented two distinctive forms, with sub-varieties in each The largest number is represented by circular discs, ranging from 4½ to 5½ inches in diameter These are convex and occasionally crumpled in appearance and were all formed into a ball when exhumed Only one amongst them had a number of minute holes around the edge and another specimen had a marginal rope-like design The second variety consisted of large pieces cut to shape resembling the Bull's Head, and in these there are two varieties, one having thinner 'horns' and in the second variety the horns are stumpy and serrated, resembling more like the ram's horns than bull's The exact purpose of these silver pieces (believed to be ornaments) is not known but in view of the holes at the periphery of some specimens and the extreme thinness of their walls, appear to be objects which were intended to be rivetted to some wooden material But how this could be achieved in the examples resembling the bulls' heads or the unperforated ones is still enigmatic

The analyses of these specimens show that they are almost pure The silver contents are 99 63 per cent with about 0 37 per cent of gold in them, and thus represent a feature

which is common to several silver ornaments in Ancient India. In the copper implements also the same purity of metal is observed, there being about ½ per cent of lead+99½ per cent of copper. The former is apparently due to the impurities in the ore.

The age and the authorship of the copper hoards. There is a good deal of difference of opinion amongst scholars regarding the age and the authorship of the copper hoards in India. No opinion was expressed when the Gungeria find was first reported in *PRASB* for 1870. But Vincent Smith writing about them in *Indian Antiquary*, XXIV, p. 239, said "The fact that silver articles formed part of the Gungeria deposit has sometimes been supposed to indicate a comparatively late date for the accompanying copper implements, which would otherwise, on the strength of European data, be ascribed to a time about 1800 or 2000 B.C." Continuing further on he writes "Whether the Gungeria Plates were made from indigenous or imported silver, I do not see any reason why they should not be of high antiquity. The deposit, although buried in a spot to the south of the Narbada is clearly associated by reason of its contents, with Northern India, and not with the South (*ibid.*, p. 240).

Prof. R. Heine-Geldern, who studied the incidence of several copper hoards in North India, thought that "there must have been cultural intercourse of some kind between Northern India on the one hand and West Persia, Trans Caucasia, the Northern Caucasus and South Russia on the other, during the period from about 1200 to 1000 B.C. and that distinct traces of these connections are to be found in North Persia (Hissar IIIc, Tureng Tepe). He regarded these copper implements are the ethnic traces of the Vedic Aryans[1].

This opinion was also shared by Prof. Stuart Piggott[2] who regarded that the hoards in the Gangetic Valley and elsewhere in India should be attributed to displaced persons who fled from the Indus Valley after the break-up of the Harappa empire. Recently Shri B. B. Lal of the Archæological Survey of India published a very comprehensive list of further copper hoards[3] in India discovered since 1915 and tried to show that since most of the hoards found in India were isolated, the theory that these were the products of Harappan refugees does not stand to reason. On the other hand, the incidence of a non-descript, ill-fired, thick pottery treated with a ochre-wash, which he encountered at Rajpur-Parsu, and which presumably is earlier than the Painted Grey Ware at Hastinapura—the latter ascribed to the Aryans—leads him to think that the copper hoards should be assigned to a pre-Aryan epoch and possibly the Nishādas with whom the Aryans fought before forcing themselves in the Gangetic Valley. The problem is still left an open one and cannot be said to have been solved.

In a more recent survey Col. D. H. Gordon[4] has shown that there are two distinct movements seen in the incidence of copper hoards in India. One of the groups is concentrated in Uttar Pradesh only and the other follows the trade routes. Possibly the Gungeria hoard came from Bihar because it is from this group that we have the most interesting parallels for it, in the shape of 17 bar celts from Hami, in the Palamau district, as against only one from the Gangetic Valley group, viz., from Rajpur-Parsu in U. P. The fact that many of the implements from Gungeria are unfinished, i. e., not sharpened fully, also suggest that they were intended for the trade and perhaps were not used even once. The Nagpur Museum bar celt has some very sharply cut incisions on the sides near the blade on one of the specimens, but this was apparently due to the maker of the implement than its user subsequently.

3. Three copper celts from Kesli, district Sagar

Besides the share from the Gungeria finds, the Museum also contains three copper celts from Kesli. The museum records show that these were forwarded to the Museum by

[1] R. Heine-Geldern 'Archæological traces of the Vedic Aryans', *J I S O A*, IV (1936), pp. 87—113, and 'New Light on the Aryan Migration to India', *Bulletin of the American Institute for Iranian Art and Archaeology*, V (June 1937), pp. 7—16.

[2] Stuart Piggott, 'Pre-historic copper hoards in the Ganges Basin', *Antiquity*, No. 72 (1944), pp. 173—182.

[3] *Ancient India*, No. 7, pp. 20—39.

[4] Gordon, *Pre-historic Background of Indian Culture*, p. 142 and Fig. 19.

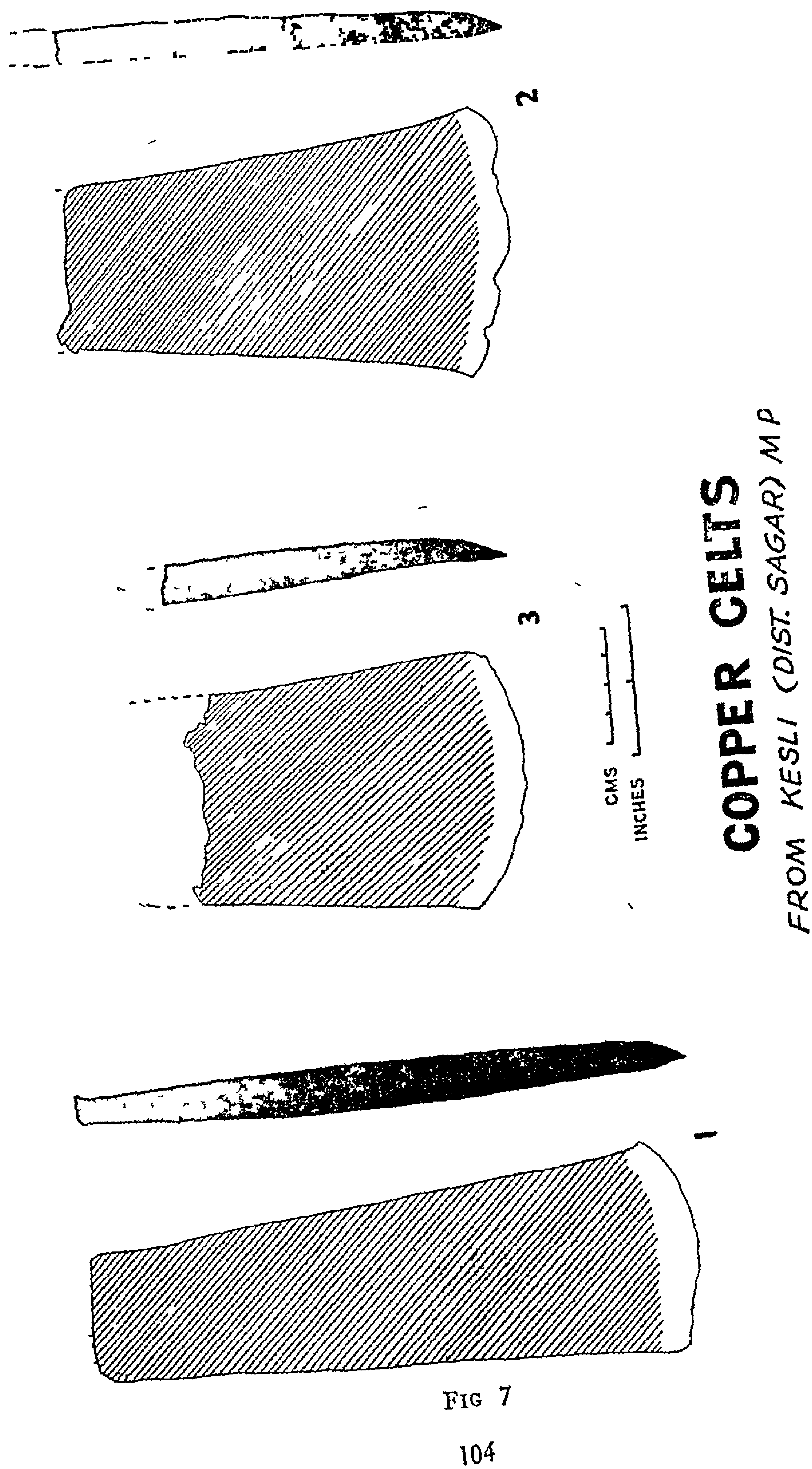


FIG 7

Mr W N Maw, I C S, Deputy Commissioner of Sagar, in October 1911 It is reported that they were found by one Anant Singh Chamar, in the village Kesli, while removing some thorny bushes in his field in April that year and were purchased from him for Rs 3 for the museum (Mr Maw's letter No 417, dated 6-10-11)

All the three celts from Kesli belong to the 'Flat' variety, have a sub-triangular shape which is commonly found amongst such implements The tendency for extra-splayed-ends seen in the Gungeria specimens is absent in these and they belong to the simplified form, very common amongst specimens found in the Deccan Only two of the celts from Kesli are completely preserved (Nos 64-65) while the third one has its top portion missing At the time of their discovery all of them were covered with a thick green patina all over but these have subsequently been cleaned and now show a very pure copper-red metallic fabric within, though not chemically examined

The village Kesli lies about 30 miles due South of Sagar (36 miles by Road) *via* Gaur Jhamar in the Rehli tahsil It holds a weekly market and is mostly known in the vicinity for its timber trade In 1958-59, the author of this paper visited this village in order to see if any further antiquities could be found in this area, but beyond the fact that the actual spot of their discovery lies much in the interior in the forest about 2 miles away from the village, no further information could be gathered The village does not show any signs of antiquities nor are there any mounds in its vicinity

This hoard is not included in the list of 34 sites listed by Shri B B Lal in *Ancient India*, No 7, and the celts are being published here for the first time

No 64, the most complete specimen in this collection, measures 21 8 cms long and 4 5 cms broad at the top, 7 8 cms across the blade and is about 1 8 cms in thickness The cutting edge is hammered like an adze by bevelling the lower end, and the top end is slightly outturned This specimen weighs 1 64 Kilograms

No 65 is another nearly complete specimen It measures 15 5 cms in length, being comparatively smaller than the first Its width is 5 5 cms at the top and 9 cms across the blade The blade is much damaged by use as also the top of the celt It weighs 1 155 Kilograms The third celt (No 66) is only a fragment It measures 9 cms across the blade and probably was of the same size as the two previous specimens Its present length is 11 5 cms about 7 2 cms in the middle and has the same thickness of about 1 3 cms as the other two specimens Being broken it weighs a little less being about 0 895 Kilograms

Except for the new finds-pot indicated by the hoard, to the north of the Narmada river, the typology of the celts adds nothing new to our knowledge But the finds-pot itself has a few implications in respect of the distribution of copper hoards in India Lal's map (*Ancient India*, No 7, Fig 1, on page 21) shows no sites yielding copper implements in the Central Indian region, but with the finding of flat and splayed-end copper axes at Navda-toli on the Narmada (*Indian Archaeology*, a review for 1957-58, Plate XXXVII, A) and with the implements from the present hoard this gap may now be said to have been filled The region to the west of Gungeria indicated by a void in this map is also similarly filled by the recent discovery of two flat celts reported to have been discovered at Balpur[1] on the Mahanadi The Saurashtra region also has now given us new evidence from the recent discoveries made at Lothal (*Indian Archaeology*, a review for 1957-58, Pl XXI A), Prabhas Pattan or Somnath (*Indian Archaeology*, a review for 1955-56, p 7) and from two celts of unknown provenance in the Watson Museum at Rajkot, recently reported by the present writer[2]

[1] I had occasion to inspect these two celts in the collection of the Late Pandit Lochan Prasad Pandeya in his house at Bilaspur in 1958 Both of them were flat celts and so far as I can recollect one of them was fitted with Slipped-on oval ring The latter was movable and seems to be an uncommon feature From the information supplied by me the late Col D H Gordon has mentioned these two celts in his book, *Pre-historic Background of Indian Culture* (Bombay 1958), p 142

[2] Dikshit, M G, "New evidence of the Harappa Culture in Saurashtra", *Vallabha Vidyanagar Bulletin*, I (1957), pp 23-24 and Plate VIII B

A 2313—15 A

4 Microliths from the Pachmarhi Shelters

Dr G R Hunter, M A , D Phil (Oxon), Professor of History at the Robertson College, Jabalpur, and subsequently Principal, Morris College, Nagpur, had explored a large number of rock-shelters with paintings in the vicinity of Pachmarhi, in 1932—38 He conducted small-scale excavations, financed by himself and with the permission of Government, in three rock-shelters known as Jambu Dwip (Caves 1-2), Monte Rossa and in Dorothy Deep (Caves 1-2), in which a large number of microliths and other human artefacts were found Skeletal material, comprising mostly of bones of small children and in one case the jaw of an adult male, was obtained by him in two of these shelters, but being eaten by white-ants and having suffered from disintegration, no useful information could be gathered from this

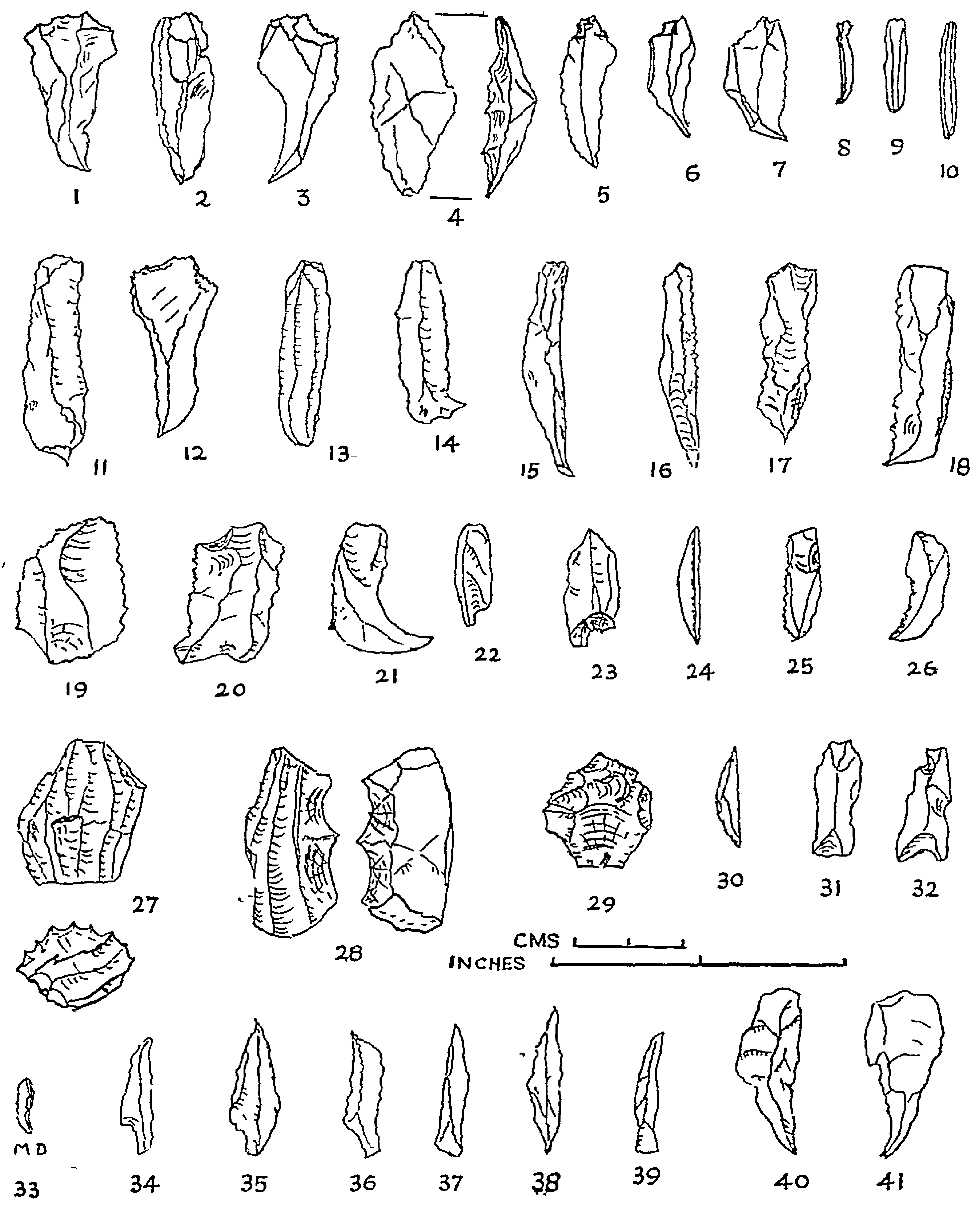
The shelters at Pachmarhi, about 60 in number, have been examined for the variety of paintings executed in them but no excavations ever seem to have been undertaken with a view to establish the authorship of the paintings and the large number of microlithic tools which are invariably found in and around such shelters now known from many parts of India The excavations conducted by Dr Hunter in the Pachmarhi shelters therefore had an unusual interest about them It was thought probable that they may shed some light both on the age and the authorship of the many quaint drawings found in these shelters The figures drawn mostly in red and yellow pigments, and occasionally in white, have a primitive outlook[1] Association of similar paintings in some caves in France and Spain as the work of pre-historic cave dwellers had created some queer notions regarding the age of the Indian counterparts and the occurrence of microlithic tools in these shelters at one time seemed to indicate that some of the drawings should be of a great age While the earlier attempts, such as those of Foote, Cockburn and others, were of a speculative character, the credit of bringing some order into the chaos most certainly goes to the Gordon couple, who copied not less than 2,700 drawings from the shelters at Pachmarhi, and rock-engravings from the Indus and Bellary regions After studying the superimposition of many paintings, noticed under fortunate circumstance they gave a tentative scheme of arranging them into four series, which were further sub-divided into groups according to the nature, character and the subject-matter of these paintings On a rough estimate they calculated *circa* 700 B C as the age of Series I, while the latest paintings, under category of Series IV, according to them, were ascribable to 6th century A D

While the Gordons were busy in copying and in establishing a sequence of cultures in the Pachmarhi shelters through the study of the paintings, Dr Hunter decided to approach the problem through archæological excavations in the shelters themselves It must be admitted at the very outset that he was not quite successful in this, in spite of the resources at his command

Dr Hunter published two reports about his work in the Dorothy Deep shelters Except an occasional mention here and there, we know nothing about his efforts in the Jambu Dwip and Monte Rossa shelters, though the material he obtained from these two shelters is preserved in the Central Museum at Nagpur Dr Hunter's first publication was an interim report about the excavations in the Dorothy Deep Shelter No 1, published in *Nagpur University Journal*, No 1 (1935), pp 28—57 It comprised of a detailed account of the excavation, setting out the problems connected with it and was accompanied by 9 appendices which gave (i) List of sectional areas excavated, (ii) A classified record of the artefacts found in different levels of the shelter, (iii) Analysis of

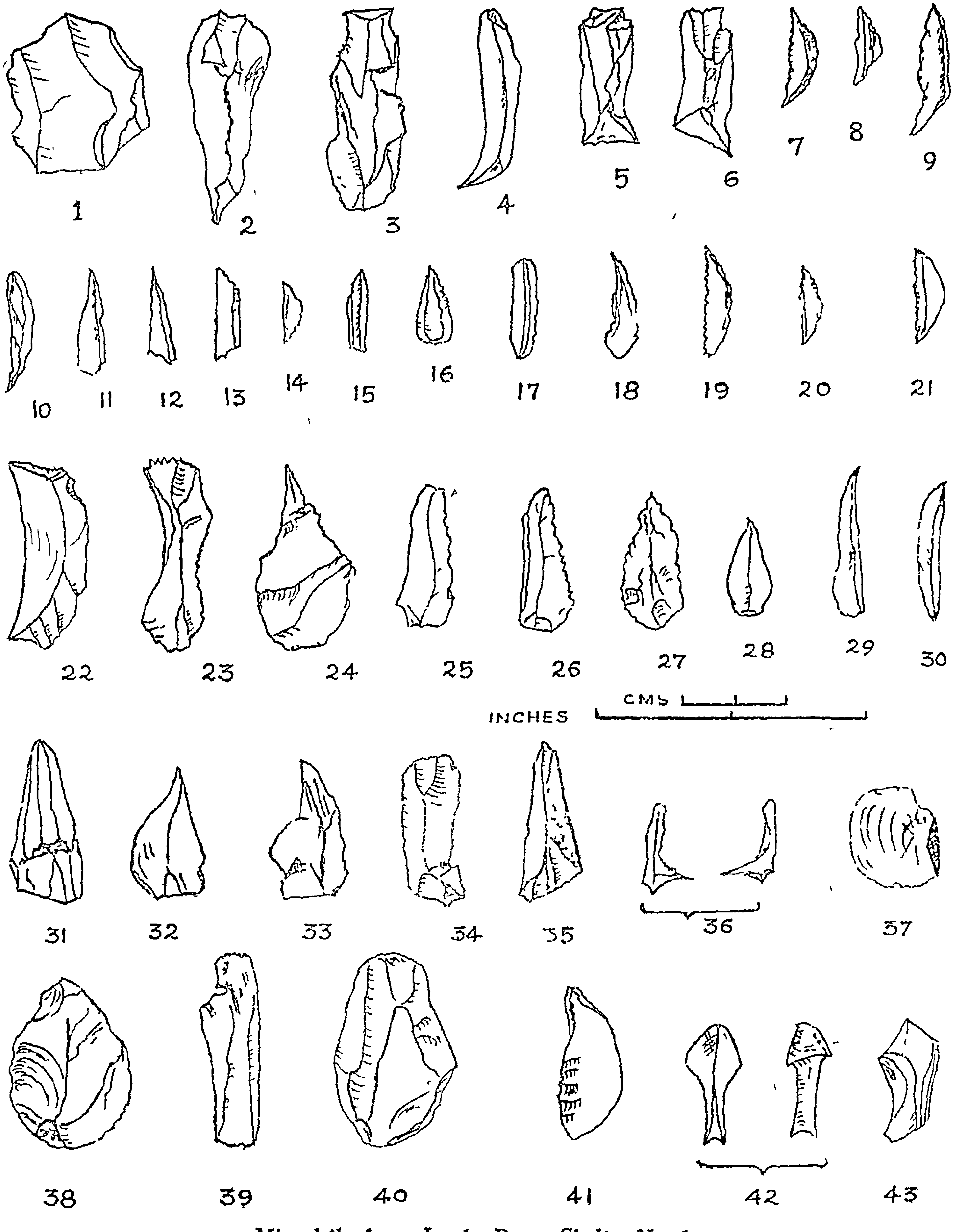
[1] Literature on this subject is scattered over different journals and periodicals Of special interets are the articles by Cockburn, "Cave Drawings in the Kaimur Range", *J R A S*, 1899, by Anderson, "Singhanpur rock paintings", *J B O R S*, IV (1918), a series of eight articles by the Gordon couple, in *Science and Culture*, Vol V, Nos 3, 5, 6, 7 and 10, in *IPEK* (1935), pp 107—114, and in *Indian Arts and Letters*, Vol X (1935), pp 35—41, There is a Memoir by Manoranjan Ghosh entitled "Rock Paintings and other antiquities of Pre-historic and Later times" as *M A S I* No 24 (1932) For two further competent surveys, see D H Gordon, 'Pre-historic Background of Indian Culture", Chapter VI (pp 98—117), and Shri B B Lal in *Archæology in India* (New Delhi, 1950), pp 44—50 See also 'Rock paintings and engravings in Raichur, Hyderabad' in *MAN*, Vol LV (1955), No 114, 'Morhana Pahar—a rediscovery' in MAN, LVIII (1958), *No 207*

A 2313—15 B



Microliths from Jambu Dwip, Shelter No 1

FIG 8



Microliths from Jambu Dwip, Shelter No. 1

FIG 9

the stone implements (microliths) of bone-material and of pottery, (iv) Explanation of certain details given in Plans I-II (illustrated by means of Graphs in Appendix V, I—III), (v) Catalogue of excavated objects found in Diwali, 1934, (vi) Letters from the Pitts Rivers and the University Museums, Oxford, regarding the nature of the microlithic material and the skeletal material respectively, and finally (vii) by Field notes giving the day-to-day diary of the excavations This interim report is illustrated with two figs on Pl I which shows two views of the skeleton found in the Dorothy Deep Shelter during Diwali, 1934

The second report is entitled "Final Report on the excavation in the Mahadeo Hills" and was published in *Nagpur University Journal*, No 2 (1936), pp 127—144 It gives a *resume* of further work in the same shelter and in the Appendix (X) Field notes of the day-to-day progress in the excavation are given in great detail Appendix XI gives a catalogue of further finds, comprising of 144 entries Appendix XII gives the floor contours of the cave on a graph paper, while Appendix XIII is a report from Dr Morant, of the University College, London, in respect of a skeleton newly found that year It is stated that it belonged to a single individual, aged between 13—17 years and having a medium height of about 4 ft 11 inches This final report is accompanied by four photographs (Figs 2—5) which show some of the microliths, but unfortunately on too small a scale to make their identification rather difficult Fig 6 illustrates a few fragments of terracotta figurines recovered during the excavation

I have elaborated the contents of Dr Hunter's report since these are published in a comparatively inaccessible journal and with a view to show how he wanted to be meticulous regarding the results he obtained in the shelters at Pachmarhi In spite of these precautions the published report of Dr Hunter hardly does any justice to the subject and it has often been found that the data he collected lacks adequate documentation The late Col D H Gordon, who had seen Dr Hunter at work in Pachmarhi, had taken some notes regarding these excavations, with the help of these he tried to construe a cogent picture of the sequence of cultures obtained at Pachmarhi through Dr Hunter's published report but even in this he found the task to be a very difficult one Gordon's results are analysed in his paper on "The Stone Industries of the Holocene in India and Pakistan" published in *Ancient India*, No 6, pp 73-74 and in Appendix B on Dr Hunter's work Gordon records that "as the areas excavated were of different sizes varying in length, width and depth" it is quite hopeless to attempt a plan of the digging areas that vary in dimensions at every level" (*ibid*, p 86) To add to the complexities of the problem, Dr Hunter used a very fantastic method for the recording of his finds He measured the microliths, bones and even pottery by the measure of cigarette tins (!) and by the glass which he has explained in a footnote in his report as=liqueur glass content 2 table-spoonfuls ! Such information hardly conveys anything to the student who wishes to study his finds The labels which accompanied the tins, mostly scratched in pencil on the field and faded in course of time, did not give any substantial information The entries like 24-III, Flakes, 36-I Flints, were often unaccompanied by any other details regarding the finds-pot, locus and even depth A large amount of material thus presented by Dr Hunter was found to be quite unserviceable and could not be used for the present paper The Central Museum, Nagpur, preserved as many as sixty tins and thirty paper envelopes as a gift from Dr Hunter, but this assemblage was not indicative of the total quantity he exhumed from his excavations The Museum records showed that some finds (including pottery pieces which he has illustrated in his report) were taken away by Dr Hunter subsequently with the permission of the Government and presumably were presented to the Pitts Rivers Museum at Oxford But this was not all It was later on learnt that some part of the Pachmarhi collection was also presented to the Nagpur University Library, where it was exhibited for some years and thence lost sight of With such handicaps I felt that no useful purpose would be served in salvaging

the finds and the only alternative would have been to treat the whole collection as "surface finds from the Pachmarhi shelters" and to report about them on typological standards

While sorting the gift collection with this aim, by a fortunate circumstance, I discovered that a number of tins were retaining the labels quite intact, together with the depths, *loci*, etc , carefully marked on them and I soon found that those tins related to the material which Dr Hunter had excavated from the rock-shelters shown as Jambu Dwip in the summer of 1933 No report of these finds was ever made and I, therefore, take this opportunity to publish and illustrate the material from these specimens preserved in the Nagpur Museum, within the limitations set forth in the earlier paragraph

MICROLITHS FROM THE JAMBU DWIP SHELTERS

The rock shelters known as Jambu Dwip are fairly well-known to the visitors to Pachmarhi About a mile to the north of the Rifle Range, from the source of the Jambu Dwip Nullah running east-west, and stretching on the opposite bank of the ravine towards Badkachhar there are nine shelters with paintings Of these, Nos 1-2, 3-4, 6 and 7 stand in adjacent groups but are widely separated from each other Dr Hunter's excavations were confined to Caves 1 and 2, which have a small nullah in-between It was in this nullah section that Dr Hunter was able to unearth the skeleton of a small boy in the course of his explorations The skeleton had disintegrated being eaten by white-ants but fortunately all the associated finds found in this area were recovered intact and have added to the interest in the preparation of this note

Dr Hunter chose different localities in these two shelters for his excavation The ground or the platform which was not covered or shaded by the overhang of the projecting rock was designated by him as the 'Outer Section', while the floor space below the overhanging roof of the shelter was called the 'Inner section' Intermediate space between the two has been called the 'Middle Section' As already narrated the divide between the caves gave room for a small stream and has been called the 'Nullah Section'

For Jambu Dwip Cave No 1, the following data is available —

(a) *Outer Section* We have as many as 7 tins and packets containing microliths, artefacts and other waste material, comprising of over 560 specimens The material is divided into two lots (i) excavated from surface to 6 inches, and (ii) material from 6" to 1' 6" or 2 ft It appears that bed-rock was touched in the outer section at a maximum depth of 2 feet (or 1 ft 6 inches in some cases)

(b) For the Nullah section the stone artefacts are comparatively few consisting of 2 tins containing about 30 worked tools; a small Trench in the area, excavated to bed-rock seems to have yielded extremely few specimens (about 23 in number) but as indicated already we have no details regarding the total yield from any of the trenches excavated by Dr Hunter I have illustrated six select examples which are definitely recorded as found in association with the burial in the Nullah (Fig 9 last row, Nos 38—43) About this burial (skeleton No 2) we have the following report from Dr Buxton —

> 'Skeleton 2 Fragment of a skeleton of a child, 6-7 years old There is evidence even at that age of hard diet, such as is usual in primitive people It is interesting to note that even at that early age there are signs of flattening and bowing of the thigh-bone This is against characteristic of the primitive peoples'

Dr Buxton does not say anything about the racial and other ethnic affinities of this or other skeletons found in the Pachmarhi shelters

The details regarding the Trench in the Nullah area (which yielded the skeleton) are surprisingly few On the analogy of the records maintained by Dr Hunter, in respect of his work in the Dorothy Deep shelters and

as published in the NUJ, itwould appear possible that the entire shelter was gridded (and perhaps plotted on a graph paper) with Roman Capital letters A, B, C, L, etc , in one direction and with Arabic numerals like 1, 2, 21, 22, and so on in the other The plot yielding the skeleton is marked as 21-19 × P-L on the tins and small paper envelopes enclosing the finds And again resorting to the analogy of his subsequent work in the Dorothy Deep shelter, it works out that the dimensions of this excavated plot were not more than 6 ft by 3 ft This of course is a surmise made from the scanty records available, but knowing that the skeleton recovered was that of a child, the estimated dimension of the Trench may not be wide off the mark The exact depth at which the skeleton was recovered or whether it lay on the bed-rock itself it is not possible to ascertain There is reason to believe however that the bed-rock was touched there only after reaching a depth of 1 foot or so, as the records stop after 1 ft 2 inches level It is not possible to be more accurate beyond this, because there is a possibility that some of the important microliths, found in association with the skeleton, were probably removed from the Museum for further scrutiny by Dr Hunter himself

(c) *Middle Section* In respect of the middle section in Cave 1, it appears that Dr Hunter excavated two areas, which he designated as Area 1 and Area 2 The first one seems to have been more or less sterile since the finds comprise of one tin containing 6 worked tools and a very large number of nodules and cores, waste flakes, etc , which may be regarded as discarded material All these are collected from a level designated as 'Surface to bed-rock' and consequently are of not much stratigraphical value In Area 2, the bed-rock was touched at 1 ft 6 inches and the finds are classified in two groups (a) Surface to 1 ft 2 inches and (b) Surface to 1 ft 6 inches (Bed-rock) It would seem that the attempt to record them in two groups had to be given up when the bed-rock was touched after a further digging of 4 inches only being the difference in the levels between the two groups

The records, in spite of the admitted inadequacy and other defects, seem to establish two things very clearly First, the habitation in the shelter and the cultural debris accumulated therefrom is only about a foot or so in the inner recesses of the shelters and increases to about 2 feet near their entrances or what Hunter proposes to call the Outer Sections Secondly, the soil samples which Dr Hunter collected from various localities (inclusive of the evidence from the Dorothy Deep Shelters) show that the implementiferous deposits constitute of a dark-brown or black soil, which may have accumulated in the shelters from the re-washed laterites and may therefore be not contemporary with the initial occupation of the shelters, when the rock surfaces were painted in the pre-occupational phase It is not possible to argue with certainty on this point for want of adequate records but after studying the material one feels it worth while to record this as an impression which requires corroboration Dr Hunter had carefully preserved a number of small bone fragments encountered in these shelters (Jambu Dwip Caves 1 and 2 , and from Monte Rossa also) but the possibilities of contamination, a long passage of time after their excavation as well as the smallness of the samples themselves were the factors which prevented us from getting them analysed for C 14 Carbon determination

Now coming to the Microlithic implements themselves, which constitute the major bulk of the antiquities, it was first thought that a careful count of all the material will be helpful in determining if certain types of implements or artefacts were predominant in the ' upper ' and the ' lower ' levels of the excavation, if an artificial division of that type could be permitted on the basis of the available data But as stated earlier we are not sure if the Museum Collection represents *all* that was found in the shelters Secondly, the difficulty was in connection with certain levels which were recorded as 'Surface' to 1 ft 6 inches bed-rock and therefore virtually amounted to be equivalent as surface

finds It was possible however to construct a stratigraphical chart for the 'Outer Section' of Jambu Dwip, Shelter No 1, from the available data and is appended herewith This is further supplemented by line-drawings of the more important artefacts

The material in most of the cases for these implements is different varieties of siliceous and chalcedonic quartzes which is not found in the Vindhyan sandstones in which these shelters are situated There is a great preponderance of parallel-sided, serrated and crescentic-backed blades amongst these tools, a very large number of scrapers (generally discoid but with an occasional sprinkling of inverse scrapers) Burins are comparatively rare, the awls are very few in number, there is a general paucity of crescentic-ridged blades The cores are found in an overwhelming number and this together with the fact that a large majority of the wasted flakes were found together with them is indicative of the shelters being used as 'factory' sites A considerable number of points, majority of them worked obliquely, have been noticed They are formed into scalene triangles in a large number of instances The presence of crescentic blades, triangles anp trapezoid forms characterise the microlithic industry of the Pachmarhi shelters essentially as 'geometric' but it would be premature to say anything about the 'culture' represented by it Dr Hunter, on the evidence of the large number of points, preferred to designate it as 'Tardenesian' but it would perhaps be necessary to have a more definitive evidence for the same, supported by a very accurate data To establish this a more scientific excavation is again called for, but on the present showing it appears more or less certain that the microlithic-implement-using people who resorted to the Pachmarhi shelters were different from the original visitors who have left a painted record of themselves on the rock-walls

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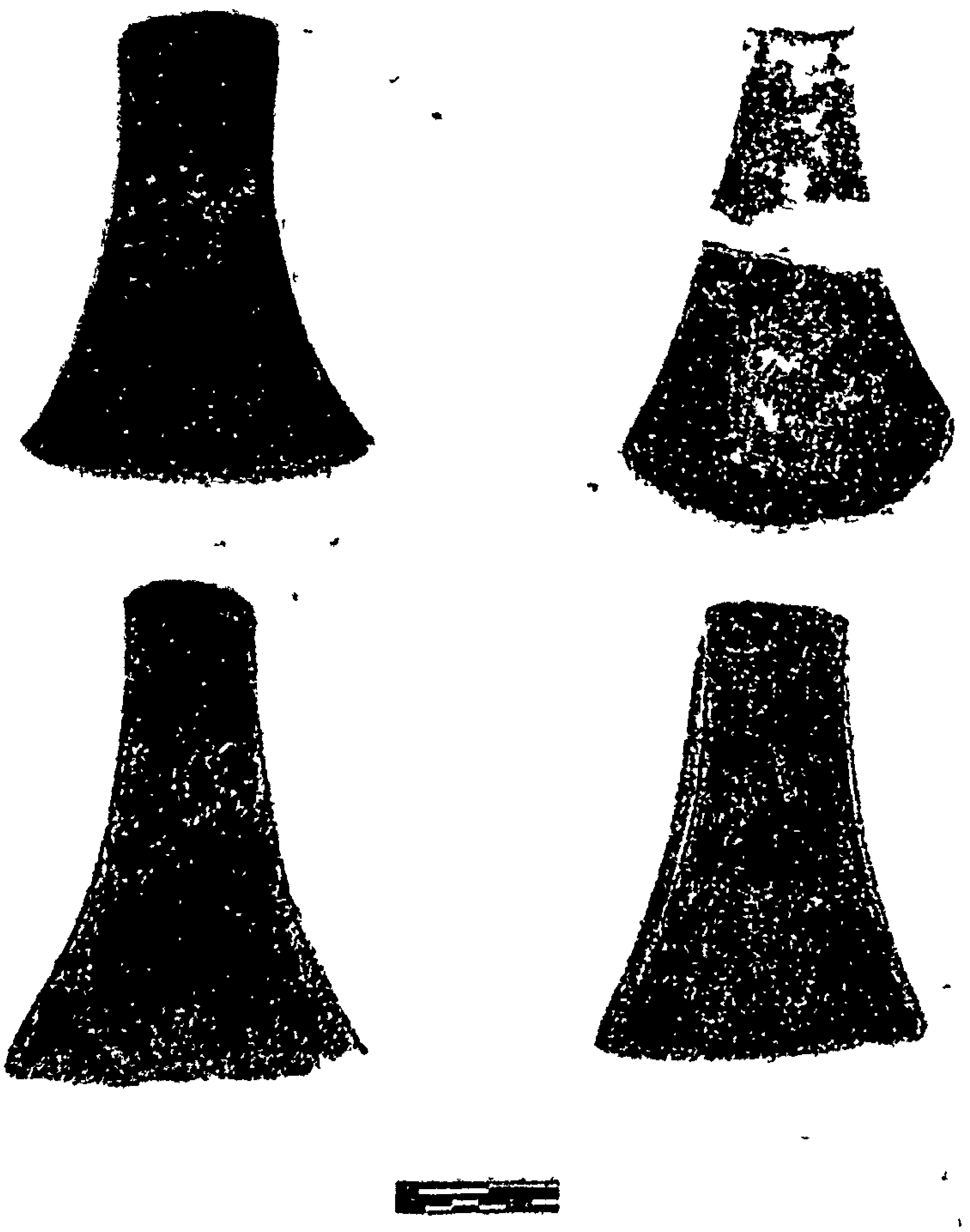
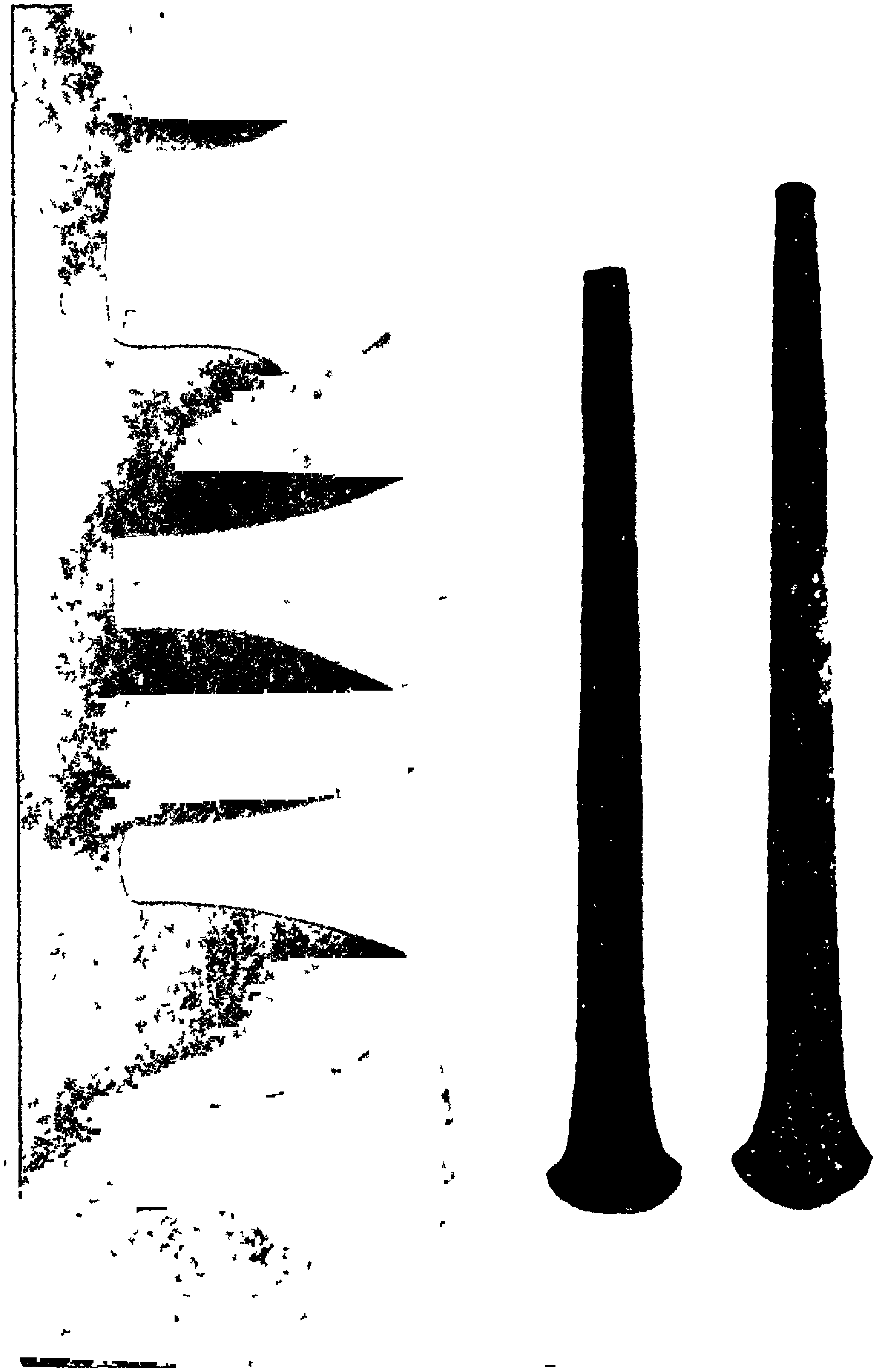
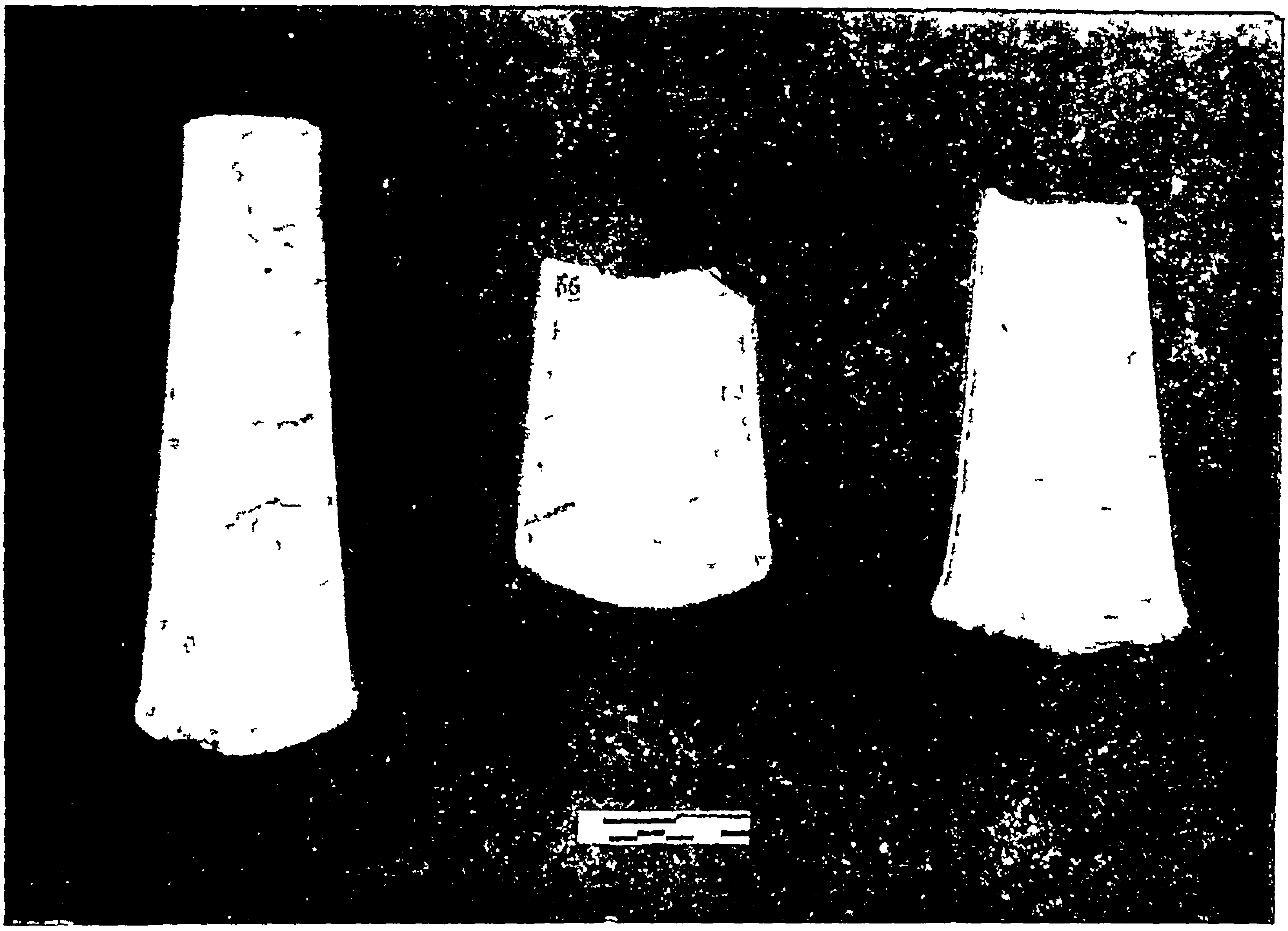


26 Copper Celts from Gungeria (M P)

PLATE XVIII



27. Different Types of Celts from Gungeria



28 Copper Celts from Keslı (Dıst Sagar, M P)

29 Trench in the Adamgarh rock shelter
Courtesy A S I

CHART SHOWING FREQUENCY DISTRIBUTION OF MICROLITHS AND CORES FROM JAMBU DWIP SHELTER AT PACHMARHI

Jambu Dwip Shelter No 1 (Hunter's Excavation, 1933)

	Outer Section	Depth or Level		
		Surface to 6 inches	6 inches to 1′—6″	1′ to Bedrock (2 feet)
	Rejected Specimens	2	38	11
	Waste Flakes	1	19	7
I	Asymmetrical Flakes	1		5
II	BLADES—			
	Parallel-sided	5	21	4
	Serrated	3	7	1
	Straight-backed		2	
	Pointed-backed	1	9	2
	Crescentic-backed	1	2	4
III	GEOMETRICS			
	Lunates	1		2
	Trapezes			1
IV	SCRAPERS—			
	Discoid		8	7
	Inverse	4	2	1
V	Chip Points	5	21	8
VI	Worked Points—			
	Obliquely worked	3	9	3
	Bi-marginally retouched	4	20	18 (one hafted)
VII	Burins			
VIII	Crested Ridged Flakes	2	2	
IX	Cores	1 fluted	6	2+1 fluted
	Total*	34	166	67

*The percentage has not been ascertained for want of sufficient data

Microliths from Adamgarh Rock–Shelters (Madhya Pradesh)

By

Dr R. V Joshi, Nagpur

In India, the largest number of rock-shelters are in the Vindhyan region of Madhya Pradesh Several of them have paintings on the rock-walls in red and white colours and practically every rock-shelter contains microliths in the loose surface deposits A group of such rock-shelters in the Panchmarhi hills had been explored more thoroughly, but so far no detailed report on the microlithic industries of these rock-shelters is available

The present writer recently excavated the microlithic site[1] on the Adamgarh hill near Hoshangabad in Madhya Pradesh A preliminary account of the microliths obtained in this excavation is presented in this short paper The results of the typological studies of the microliths recovered from the trench No ADG-1 have been shown graphically and also in the tabular form For want of additional data on the soil analysis, the C-14 dates and the animal bones recovered in this excavation, no attempt has been made to draw specific conclusions as regards the type of culture or cultures represented by these microlithic industries

The microlith-bearing deposit on the Adamgarh hill is the black clay[2] It is a massive deposit having no partings or layers indicating its formation by water action It lies either directly on the local quartzite rocks or rests unconformably over the eroded red clays of lateritic origin There is thus a clear stratigraphic break between the underlying red clay yielding Early Stone Age industries and the black clay containing the microliths

ADAMGARH EXCAVATION
Microliths From Trench ADG-1

Depths in cms (1)	Triangles (2)	Trapezes (3)	Scrapers (4)	Cores (5)	Points (6)	Blades (7)	Total (8)
0—10			1	4	67	39	111
10—20	31	1	22	74	163	167	458
20—30	55	6	32	154	268	389	904
30—40	37	2	23	99	687	605	1453
40—50	39	2	17	106	429	517	1110
50—60	19	1	17	90	355	360	842
60—70	1		2	8	55	97	163
Total	182	12	114	535	2024	2174	5041

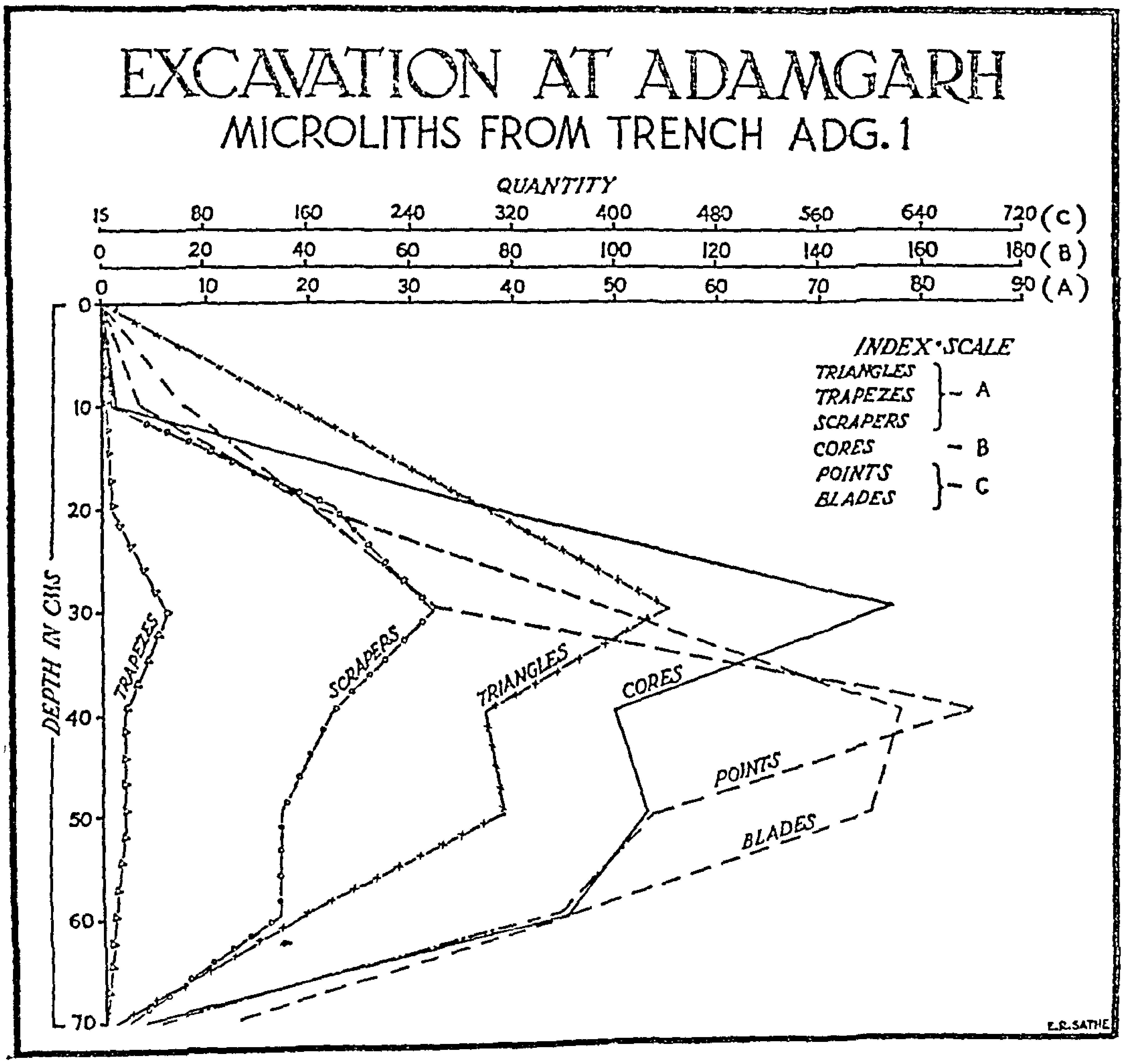
[1] *Indian Archaeology*, 1960-61, p 12-16

[2] *Proc Indian Science Congress*, 1962, Part III, p 1414

In its mineral contents and chemical composition, this back clay is the same black cotton soil from the Narmada terrace surrounding the Adamgarh hill The occurrence of the black clay on the top of the Adamgarh hill seems to be due to wind action, and this is an important evidence of the increased dryness, perhaps due to a marked climatic change during the occupation of the hill by the microlith-using people

The microliths are made on a variety of siliceous minerals like chalcedony, chert and jasper The nodules of these minerals are not available in the rocks of the Adamgarh hill and they must have been brought on the hill by the tool-makers from the neighbouring Narmada river From an area measuring approximately 25 sq m excavated to a depth of 2 m, over 270 kg of the waste material, including partially worked nodules and fragments, were recovered from the black soil The total weight of all the microlithic tools, however, does not exceed 5 kg The occurrence of such a huge quantity of raw material and finished and unfinished tools gives a clear idea of this microlithic factory site

The richest microlith-bearing levels in the ADG-1 are those between the 20 cms and 50 cms, which have yielded over two-thirds of the total of about 5,000 tools In all the levels, the points and blades are the chief constituents



The triangles and scrapers together form less than 5 per cent of the tool collections from the levels 40 cms and 50 cms In the 30 cms level, while the points indicate a marked decrease, there is an appreciable increase not only in the triangles and scrapers, but also in the trapezes The proportion of the trapezes is so insignificant that this tool-type does not show any characteristic feature It thus appears that only the points and blades have specific functional value in this microlithic assemblage The triangles, most of which are of scalene-type, are rather a variety of points Along with some asymmetrical points, the triangles could have been used as barbs

As stated above, the points form one of the major tool-types Excepting about 5 per cent of the points worked on flakes or irregular nodules, the majority are made on blades Among the sub-types are the bimarginally retouched points (about 7 per cent), those retouched only on one edge (about 20 per cent), points made on simple unretouched blades (about 6 per cent), crescentic points (about 6 per cent), single shouldered and tanged points (5 5 per cent), and a large number of unclassified points Besides, there are a few awls, borers and transverse arrow-heads

The blade-category includes retouched and unretouched blades and a large quantity of asymmetrical blades, flake-blades and broken blades In the retouched blades, the majority are crescentic and curved-back varieties, while the rest of the blades have straight retouched edge

The scrapers are made on cores and flakes, as well as on blades, and their several sub-types can be worked out on the basis of the nature of the scraper-edge

Some five hundred cores were obtained from this trench (ADG-I), of which nearly half seem to have been utilized as core-scrapers Besides, there are conical and cylindrical-type cores and a few with chisel-end or having tabular or discoidal forms

While the animal bones were found in association with the microliths throughout the black soil deposit in the trench ADG-I, a few pieces of highly weathered pottery of indeterminable shapes were obtained from the black-clay to a depth of 20 cms from the surface

Since the geometric forms like trapezes and triangles occur at all the levels, according to the present conventions, the entire microlithic industry of Adamgarh will have to be regarded as "geometric"

The relative increase in triangles and trapezes and the occurrence of a few fragments of mace-heads in the middle levels (30-50 cms) may be of some significance But on the whole, the microlithic assemblage and other evidence from this site, perhaps point to a hunting and food-collecting type of cultures A few more trenches have been dug in the microlith-bearing deposit on the Adamgarh hill and the study of the material from all these trenches may throw some more light on the microlithic habitations of this area The present excavation has, however, not provided any clues regarding the antiquity of the rock-paintings occurring on this hill

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Tobacco Boxes and Tinder Boxes in the Ethnological Collection of the Central Museum, Nagpur

By

P M Muley

The Central Museum, Nagpur, contains a representative collection of the tribal art of the aboriginals like the Gonds, Banjaras, Oraons, Korkus, etc , of the former Madhya Pradesh

The nucleus of the collection was formed in the pioneer days of the museum but the collection grew as objects of curiosity No serious attempt was made to have a representative collection till the year 1914 It was the late Rai Bahadur Hiralal, formerly Deputy Collector of Nagpur, who thought of supplementing it with complete sets of clothing, ornaments, objects of daily use, household articles and even images of their Gods It was at the instance of the British Museum, London, that a representative assemblage of the tribal articles was made at Nagpur This included not only the articles mentioned above but also sought to complete it by miniature models of their huts, traps and snares, hunting appliances and was supplemented by selected photographs indicating their daily life While one set was forwarded to London a few things in duplicate were retained at the Central Museum, Nagpur, and this may be said to be the real nucleus of the ethnological collection at present housed in this Museum

The ethnological collection was enriched by contributions received from the Industrial Art Exhibition in 1908, but the Indian Science Congress, Nagpur Session, 1920, contributed substantially to a major bulk of the small articles used both by the Gonds and the Korkus

Gonds are the most numerous tribe in the Madhya Pradesh and in some parts of the Vidarbha region Within the Madhya Pradesh the Gonds muster strong in the Plateau and Chhatisgarh Division and in the Chandrapur district of Maharashtra while in Mandla and the Bastar district they form the major portion of the population Numerous sub-tribes have branched off from them Many of them attained the status of an independent tribes, such as Murias, Marias, Parjas, Koyas, Pardhans and others Gonds are found in different stages of development according to their environment As there is good deal of intercommunication with outsiders they are cultivating new ideas and giving up many of their primitive ways and methods Gonds have adopted many articles of daily use, dress, ornaments, agricultural methods and even Gods, from Hindus The traces of their primitive culture are very well preserved in the ethnological collection of the Central Museum, Nagpur.

Amongst the outstanding objects housed in the museum, I propose to deal with the wooden and brass tinder receptacles which could be used as tobacco pouches also Tobacco plays a very important part in the life of the aborigines and its importance in tribal life cannot be over emphasised In Bastar, to ask for tobacco is a symbol of erotic suggestions and thus strikes at the root of life itself The tobacco cases in the museum are studied under two groups mainly from the material they are made of.

The museum has a number of such cases made in wood and of brass In the former a number of types suggest themselves from the shape as well as the decoration

No 1 It is a wooden tobacco box shaped like a bottle and is carved out of a single piece of wood The bottom and the top portion is decorated with horizontally grooved lines while the belly of the box is decorated with teeth like projections hanging from a looped string The bottle is provided with a stopper made of wood and the case is hung from the waist by means of a string This type is commonly used by Maria Gonds of Bastar (Cf "Verrier Elwin *The Tribal Art of Middle India*", Fig 70) Length 9 4 cms Dia 3 2

No 2 Represents a similar bottle with less sophasticated form It has a plain body and the groovings consists of incised lines on the neck and body (Cf "The Tribal Art of Middle India" Fig 70) Not illustrated, Length 7 9 cms Dia 2 6 cms

No 3 It is a unique type consisting of two lathe-turned balls joined together and hollowed from both ends There are openings on both the sides which suggested that one end of it could be used as a tobacco pouch and the other as a receptacle for cotton in the form of tinder Such a combination is rarely met with and the specimen does not seem to be paralleled elsewhere Length 6 6 cms Dia 3 0 cms

No 4 Is a plain torpedo-shaped bottle which is carved out of a single piece and turned on a lathe It belongs to a plain variety and has a grooved ridge at the top for holding its stopper Length 6 5 cms Dia 3 00 cms

No 5 It belongs to the same class as above No 4 but differs from it in having zinc cap covering on the entire portion of the belly and the narrow mouth The zinc sheath is serrated at the lower edges and there is a tight fitting wooden stopper for the case This and the two earlier instances are reckoned by Dr Verrier Elwin to represent a decorative motif representing a girl's nipples, which, however, does not seem to be the case It is more probable that the shape is derived from the fruits in nature and as will be shown below we have four actual specimens in the fruit shells in the museum Length 7 5 cms Dia 3 8 cms

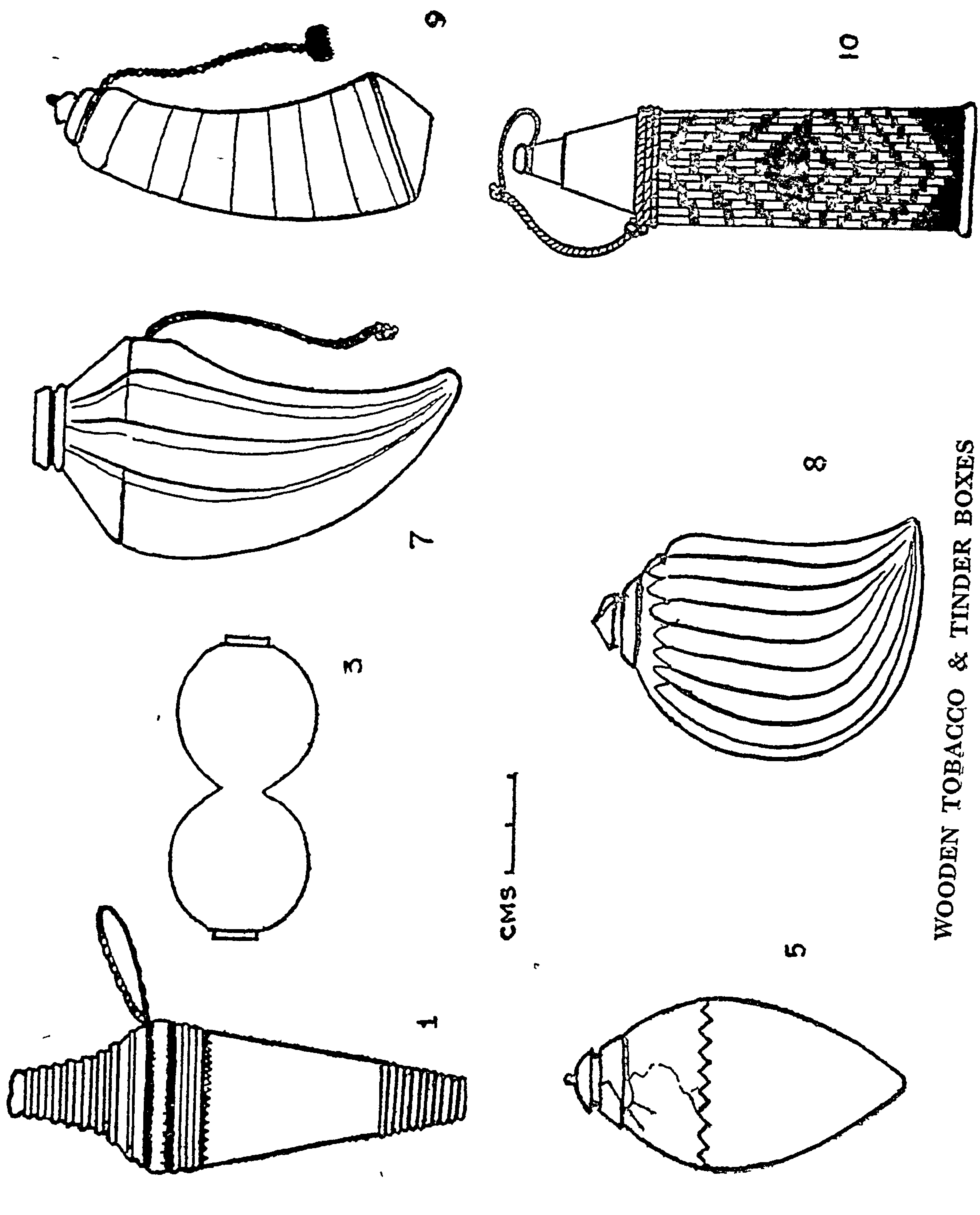
No 6 It is yet another receptacle for tobacco but the wood has been turned into eleven gadroons starting from the pointed base and reaching up to the neck The neck portion is left plain and takes in a wooden stopper Though simple the elegance of form and the symmetry of the gadroons is quite noteworthy This type is primarily used by the Gonds and does not seem to have been illustrated earlier Length 5 5 cms Dia 4 2

No. 7 The *following two tobacco cases* represent a new variety which may be described as representing a unripe mango or 'Kuhiri' type The lower portion is a single piece more or less horn-shaped and hollowed from within The rounded portion on the top has been made into a separate piece complete with groovings at the neck, etc , and the two pieces have been joined together by lac or some resinous matter The bottle is provided with a pinacled top stopper For hanging the pouch a hole is bored at the concave end of the lower receptacle and a knotted string is passed through it for suspension on the girdle The body of the bottle has gadroons in imitation of wild fruit L 9 00 cms Thick 2 3 cms

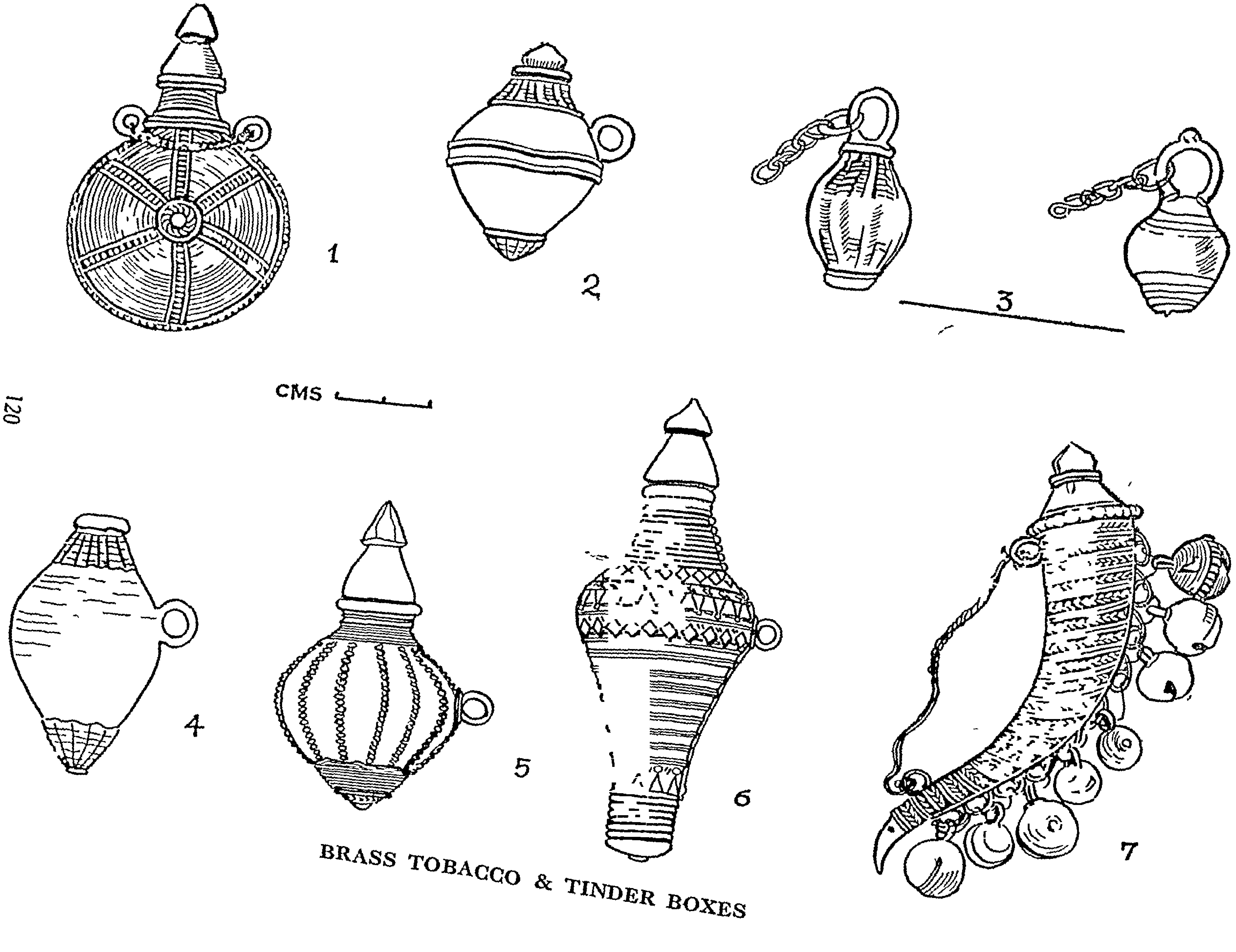
No 8 This is similar to the above but is more flattish and adorned with graceful curves on the body Like the above specimen it is also made in two pieces and joined by lac An unusual feature is the dome top having a square cross section for the peg of the stopper Square stoppers are rarely seen in the aboriginal equipment Dr Verrier Elwin illustrates a tobacco case (of wood) which has a petaled design on the body and cross hatchings (*Tribal Art of Middle India*) Fig 69 [Plate No 6] , L 7 1 cms Thick 2 00 cms

No 9 Another variety is represented by a curved wooden receptacle which could easily be mistaken for a phallus by foreign anthropologists Like specimen No 5, it has a zinc top which covers the mouth portion The body of the wood is decorated with four bands in red

Verrier Elwin *The Tribal Art of Middle India Fig 70*

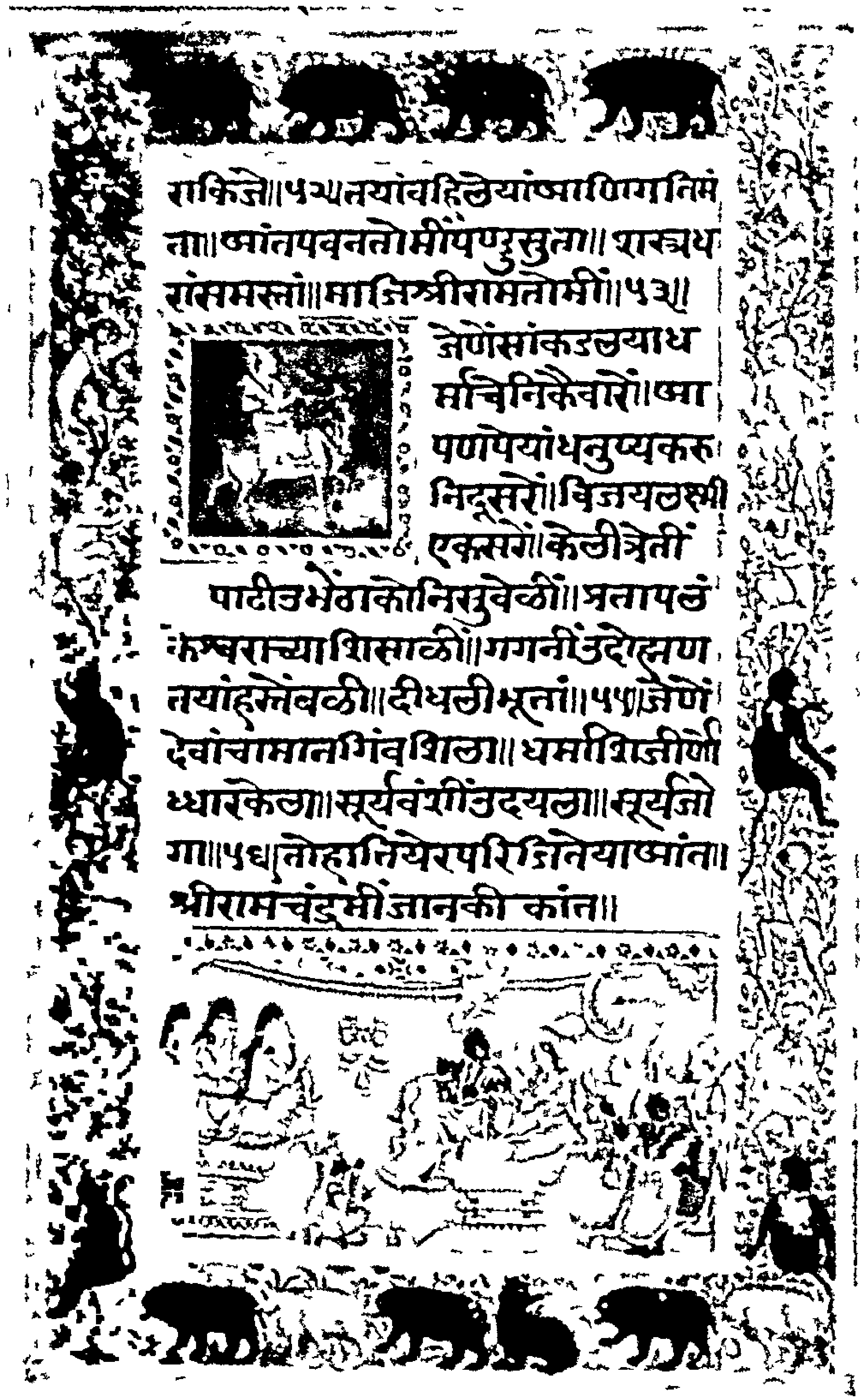


WOODEN TOBACCO & TINDER BOXES



BRASS TOBACCO & TINDER BOXES

PLATE E



Shri Rama

Krishna and Arjuna in their chariot

Illustrations from Jñānesvarī

(Saka 1685 (1763 A D)

colour which has disintegrated in time or by constant handling The bottle is held from a tasselled string tied from a groove near the neck It has a plain domed wooden stopper [Plate No 8] L 8 1 cms

No 10 It is another fine example of tribal Art It is a small cylindrical bottle of wood with a conical top It is hollowed by drilling and the case is covered by a matted covering which makes a very fine diaper pattern of elongated diamonds on both the sides The design is primitive yet simple and attractive on account of the contrasting colours used for the warp and the weft The bottle is hung by the string at the top which connects it to the stopper *Similar tubes of greater lengths are* used by Kutra Khonds in the Ganjam Distt (*Tribal Art of Mid India*) Fig 65, 66 but the material used is bamboo which accounts for their extraordinary length and the multitude of pattern which appear to be incised on the body The bottle in the museum is of wood and the decoration is in mat work [Plate No 5] L 10 2 cms D 2 3 cms

The Ethnological collection in the museum has also a compendium for lighting the strike-a-light as well as a manicure set The apparatus is held in a ring which contains a large piece of iron which could be used for striking the flint The manicure set, as usual consisting of three items, has a nail-parer, a pair of tongs and a needle for removing thorns, all carried in a single unit Besides this, it has three long chains at the end of which are hung the tinder boxes which in two cases are prepared by hollowing a fruit called " Hingan bet " The third one is a brass bell-shaped tinder box with a hole at the base for keeping the cotton The antiquity of nail-parer and manicure set can be traced back to the chalcolithic times in India being known from Chanudaro and early historical levels at Patna and Hastinapur

The museum has got only one tinder case which consists of a tender ' bilva ' fruit hollowed out and fitted with a stopper

The Brass specimens in the museum Ethnological collection consists of 9 pieces and are distinct for their shapes and varieties They are invariably made in brass by the *cire-perdue* process They employ the technique of having concentric wires as the base over which the ornaments or decorations are soldered by the *applique* technique They are generally very sturdy and comparatively heavier for the objects they carry [Fig 1 7]

No 1 Two of them are shaped like wheels having a flat underside and a slightly conical top The underside is decorated with concentric rings-with a beaded border and the upper domical side carries over it six beaded bands like the spokes of the wheel The hub is represented by a prominently large ferrule There are two specimens of this class each about 5 c m *in diameter These cases are not paralled* by any specimen illustrated by Dr Elwin His case representing a wheel The tribal Art of Middle India (Fig 66) shows clearly the wooden joints in imitation in brass but our specimens do not have anything of the kind They very nearly approach the object supposed to represent a tortoise The Tribal Art of Middle India [Fig 68] which, however, is not the case L 5 8 cms Dia 5 1 cms

No 2 The next class belongs to a series which is commonly known as the 'Dorle', i e, like a biconical bead with sharp tapering sides The specimen of this class is provided with a decorated cap with serrated designs at either ends and a beaded band on the central ridge It is also provided with a strong double hook on one side L 4 8 cms Dia 3 4 cms

No 3 Two other biconical specimens of this class are hung from chains and are considerably worn by use Even in this state they display the wire work beneath L 4 3 cms Dia 2 3 cms

No 4 It is a simple tobacco case which Dr Elwin describes as simulating a girl's nipples The Tribal Art of Middle India (Fig 70) Both its ends are equipped with fittings with linear-patterns The body is plain and fitted on the side with a strong hook L 6 cms Dia 3 3 cms

No 5 Another specimen belonging to the same class is a biconical bottle with a narrow base and having wire work on the top of the

A-2313—17 A

plain body The neck has a number of concentric groovings and the base is fitted with a rosette as the base The wires run across the body giving the bottle a gadrooned effect and seem to have been hammered on to the body A hook as usual is attached to the belly L 4 9 cms Dia 3 8 cms

No 6 It is an elaborately decorated bottle with a long tapering base and a comparatively shorter neck The neck is decorated with wire patterns and the belly is embellished with small diamonds and festoons in between them The lower portion of the bottle is elaborately worked with wire-work alternating with similar work arranged in herring-bone patterns which are juxtaposed Festoons also adorn the portion near the base A dividing line marks the portion for the hook which appears on the waist L 8 3 cms

No 7 The last speciman is shaped like the horn of an animal and is one of the unique types in the museum collection The top, which is conical, has a broad beaded ridge and the horn itself is decorated with wire-work and herring-bone design At one end there are a number of loops from which are hung tinkling bells which add to the grace of this neatly worked specimen The tip of the horn being left undecorated adds to the grace of the object and in spite of its elaborateness this specimen is one of the best tobacco cases preserved in the museum In design it simulates the tobacco box illustrated by Dr Elwin in 'Maria and their Ghotul' (Fig 103), though the object is undoubtedly of a different shape L 11 0 cms

Though the collection is comparatively small one, it represents many aspects of tribal art both in wood and in metal casting and has a representative character With the infiltration of Civilization in tribal areas, the art and the skill attained by the artisian in the days of the Yore is fast dying out and as such deserves to be preserved and studied

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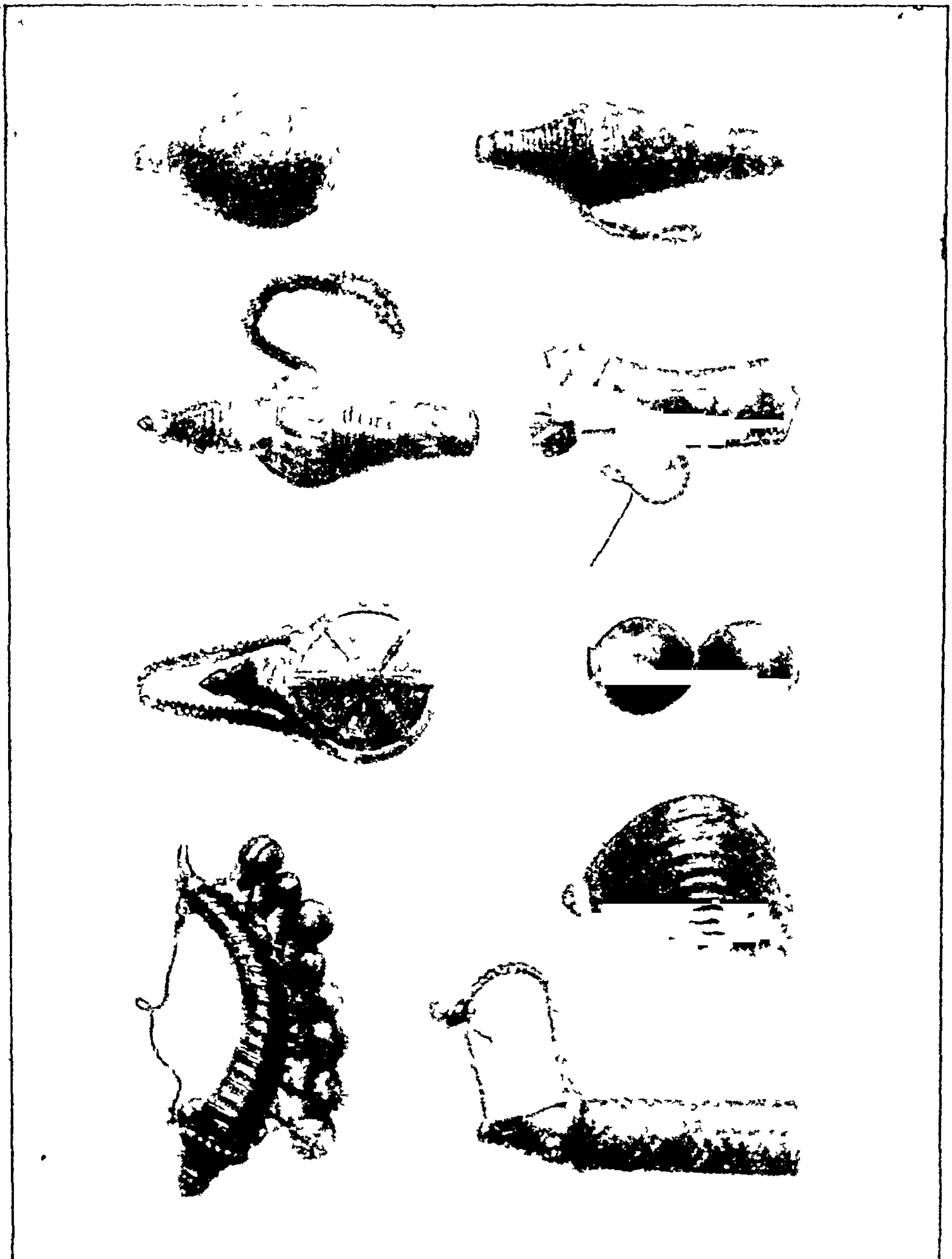
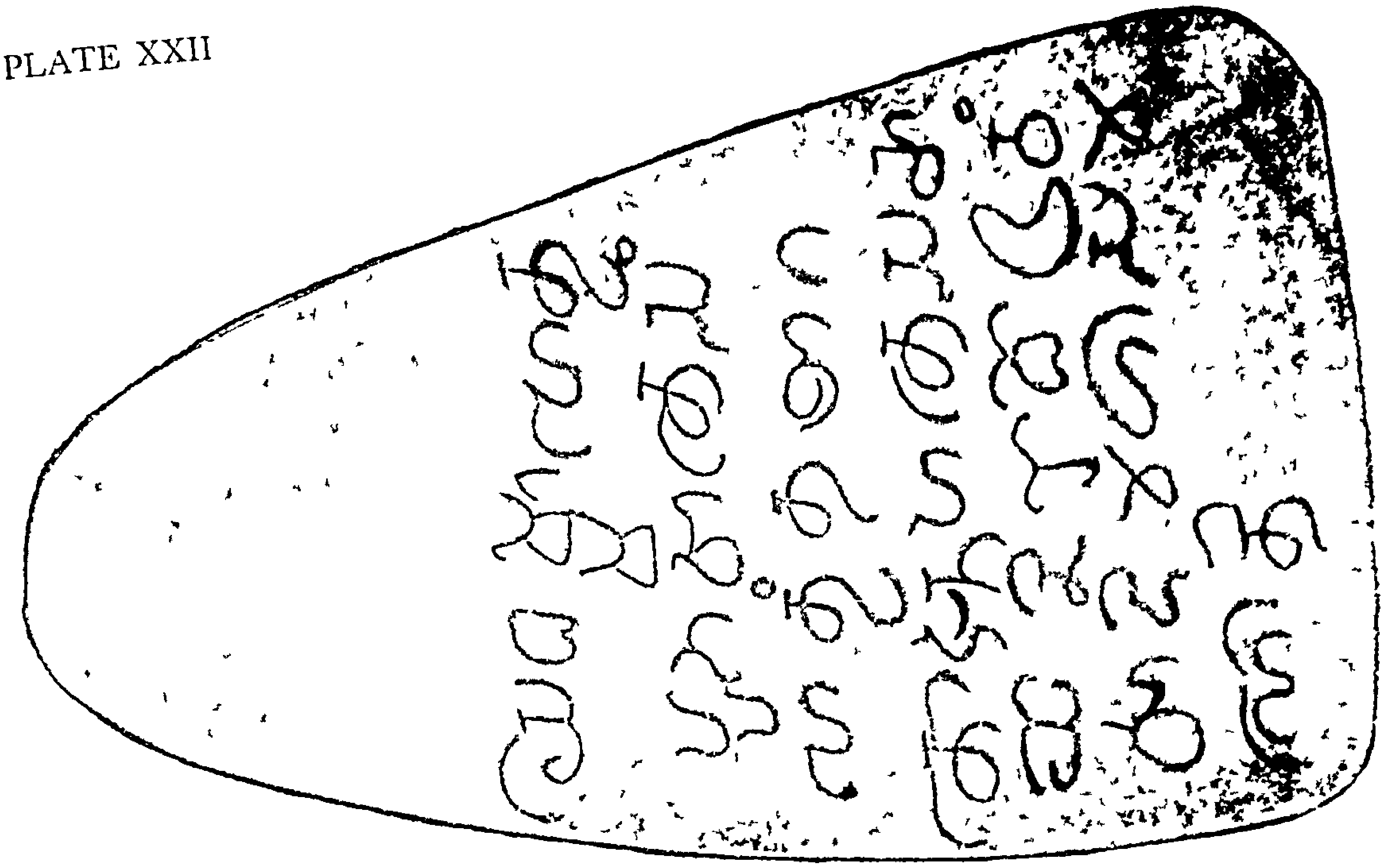
A 2313—17 B



30 Tinder boxes used by the aborigmals
(1st Row—Brass 2nd Row—Wood)



31—32 Buddha Image from Khmer

Evidences of Indian Culture in South-East Asia

By

Prof P V Bapat, Poona

Buddhism being a dominant religion at present in all the countries of south-east Asia, that is, Burma, Thailand (Siam), Cambodia, Laos and Vietnam (North and South), there is no wonder that all these countries are culturally affiliated to India We have traces in these countries not only of Buddhist culture but also of Brahmanical culture

From the shores of India, we may think of five cultural waves emanating and spreading towards countries in the south and south-east

The colonisation of Ceylon by Indians coming from northern India and leaving the western shore of India at or round about Surpāraka, under the leadership of Vijaya, may be safely dated before the commencement of the Christian era at the latest, although the ancient Chronicles of Ceylon like *Dipavamsa* and *Mahāvamsa* put that event as early as the death of the Buddha, that is 483 B C accroding to Western scholars, or 543 B C according to the traditional account of the Theravāda Buddhists of southern countries

The second cultural wave may be dated somewhere round about the 2nd and 3rd centuries A D on the eastern shores of India Amarāvati and Nagārjunikondā had already become prominent centres of Buddhism and from these places emanated the second cultural wave that dashed against the western shores of lower or southern Burma, which was known in those days as Rāmañña-desa, and also of farther south-eastern countries like Malay, Sumātrā, Funan (that is, Combodia and all southern Thailand up to its centre) and Champā, the kingdom of the Chams who founded their kingdom in the modern south-eastern corner of Vietnam.

The Third cultural wave may be put round about the 5th and 6th centuries A D in the Gupta period and may be said to have emanated from Kāñchipuram (modern Conjeevaram), the capital of the Pallavas This wave was particularly remarkable on account of its carrying the influence of Gupta art of India to Malay Peninsula, Indonesian islands, and to Funan This was the golden age of India and was characterised by the revival and spread of Brahmanism to Sumātrā, Jāvā and Cambodia

The fourth cultural wave may be dated round about the 7th—9th centuries A D when the influence of Brahmanism waned and there was resurgence of Buddhism—early Buddhism of Theravāda school in southern Burma, and northern and western Thailand under the influence of the Mons and Mahāyāna Buddhism under Śailendra kings in Sumātrā and Jāvā

The fifth and the last cultural wave may be dated round about the 9th—11th centuries A D under the influence of Pāla kings of eastern India The influence of Mahāyāna Buddhism spread far and wide to Indonesian islands and there prevailed in Cambodia the spirit of fusion between Mahāyānism and Śaivism, noticeable in the architectural monuments dedicated to Lokeśvara There was also the rise of the cult of Devarāja, where the

king was supposed to take the place of the highest among living beings and thus deserved worship at the hands of ordinary human beings The complete fusion between Buddhism and Brahmanism was effected and it continued until the fall of Khmer kings of Cambodia in the 15th century A D

In this paper we intend to restrict ourselves to the expansion of Indian culture to the countries of south-east Asia, i e , to Burma, Thailand, Cambodia, Laos and Vietnam The people of Vietnam, mostly of Chinese origin, are Mahāyānists, while the people of the remaining countries profess Buddhism of the orthodox Theravāda school

When people migrate, on a large scale, from one country to another, they carry with them their beliefs, religious or otherwise, their customs, social practices, their literature, their arts—architecture, sculpture, painting—their language, the names of individuals and towns; in short, their whole culture

If we look at the map of India side by side with that of south-east Asian countries, we will find that Lower or southern Burma is due east of the present Āndhra and southern parts of Orissa (old Kalinga) on the eastern shore of India In this part of India, there had already grown great centres of Buddhism in the region of the hills of the Eastern Ghats, Amāravatī and Nāgārjunikondā, in particular The recent archæological excavations at the latter place have revealed many Buddhist monuments From this region, a large number of adventurers, traders and along with them their religious priests as well as followers that included artists and artisans, went to southern Burma and established their little kingdoms As these people mostly came from Telangana, a part of the present Āndhra, they were called in Burma by the name of Talaings These people got so much inextricably mixed up with the local inhabitants that their later generations could no longer be distinguished and they came to be known as Mons These Mons had their centres at Thaton and Pegu —which even now is called Ossa-Pegu, as many labourers come to this place from Ossa, i e , Orissa—and they professed early form of Buddhism corresponding to modern Theravāda These Mons established their kingdoms not only in southern Burma but extended their territories to the northern and western regions of modern Thailand, as is proved by a Mon inscription in Lopburi in central Thailand written in a South Indian script They had their own culture and maintained their high position until 11th century A D At that time in northern Burma, King Aniruddha of northern Burma not being satisfied with the prevailing religion in that part and knowing that in southern Burma there was a higher form of religion as well as rich religious literature sent word to the Mon king Manuha of Thaton that he should send the religious priests as well as a copy of their sacred texts, which they should teach to his subjects This request was refused with contempt, which enraged King Aniruddha, with the result that he came down upon Thaton, defeated the king and carried as his booty the king, religious priests, their literature laden on thirty-two white elephants, and artists and artisans with him to Pagan, the capital of northern Burma As northern Burma was very backward, the culture and religion of these vanquished people of Thaton ultimately gained ground and triumphed

Even now we find a sprinkling of these Mons all over Burma and northern regions of Thailand In fact, in Pegu, the writer of this paper was guided by a gentleman who claimed to be a descendant of the Mons He was, before the separation of Burma from India, a Burman representative in one of the Houses of Legislature at New Delhi "Look at me," said he, "how tall I am and how straight is my nose " These people even now observe marriage-customs of India

Inscriptions

In the inscriptions of Mon language that have been discovered in Burma are noted several words of Indian origin and words that remind us of Indian social system There are references to the fourfold varnas of Indian society and to the material requisites in the

worship of Hindu gods such as stumps of banana trees, conch, *dūrvā* grass, sugarcane, washed rice-grain and also mention of the deity, Nārāyana Towards the beginning of the 20th century some golden scrolls with inscriptions in Pali were discovered near Prome (ancient Si-sit of the Mons, equivalent of Sriksetra) They contain passages from Vinaya and Abhidharma written in Telugu-Kannada script of South India of about 5th century A D A Buddha image has also been discovered round about the same place, on which we have an inscription in the language of the Pyus, earlier inhabitants of Tibeto origin and in Sanskrit which gives the famous Buddhist formula "*Ye dharma hetu-prabhavāh* " On another votive object, we have a Sanskrit inscription written in old Bengali script, which begins with "*Mayā Aniruddhadevena krtam* ", "Prepared by me Aniruddhadeva".

A discovery of recent date has been most interesting In the last second world-war, in Rangoon, a *stūpa* in what was called Bota-tong pagoda was destroyed in the course of bombing of the town At the end of the war, the local people thought that inasmuch as it was already ruined, they should go to the bottom of it and find out what it contains So they went on digging and clearing the whole debris To their astonishment, they found in a chamber at the base a stone casket of the shape of a spiral cone enclosing another of a similar shape with golden colour In that inner spiral conical casket, they found a small pagoda along with an image of the Buddha and two tiny pieces, of the size of a mustard seed, of the bodily relics and a small hair On the backside of the image of the Buddha, there is carved the famous Buddhist formula in Pali written in Gupta characters of the fifth century A D This formula has been already referred to above as occuring in Sanskrit The formula occurring in several Buddhist monuments all over Buddhist countries simply says that the Buddha teaches the origin of all things that have an origin and how these things can be brought to an end

In Lopburi, central Thailand, and in Sritammarat (south-western Thailand) Sanskrit inscriptions are also found probably of about 6th century A D In Cambodia, especially at Ankor Wat, and at Po-nagar near Nhatrang (old kingdom of Champā) in the south-east corner of Indo-China, hundreds of Sanskrit inscriptions have been discovered written in praise of the Buddhist or Brahmanical deities, or in praise of the kings of the soil In most of these inscriptions, the era that is used is Śaka era, though in Burma and occasionally also in Thailand, we find the use of Cūlasakkarāja, the Burmese era, which began in 640 A D

Works of Art . Architecture, Sculpture and Painting

In Burma, Thailand, Cambodia and Laos, we find, at present, that most of the *stūpas* have got towering pinnacles, which mark a development from the original dome-like shape of *stūpas* found in early times in India Even in this latter country, we occasionally find an ornamental umbrella on the hemispherical top of the *stūpa* In Burma and in Laos, we were surprised to find, as against the prevailing type of the pinnacles of *stūpas*, dome-shaped *stūpas* with a little tapering construction at the top A *stūpa* of this kind is noticed in the vicinity of Sagain Hills in north Burma It is called by name Kaungmudaw and is of enormous size with more than 800 lamp-posts around it A similar *stūpa* is also found at Vat Visun, in Luangprabang, the royal capital of Laos, though of a smaller size and without any lamp-posts In Pagan, the old capital of northern Burma, we have a large number of temples of different periods scattered over the area of 16 square miles Here we have a temple with a tower in imitation of the Buddha-Gayā temple in India On the outside of the Southern wall of this temple is still found a figure of Hanuman put in a niche in the wall Here are also some old temples constructed by Mon artists, who came along with King Manuha, when he was brought in captivity from Thaton by King Aniruddha, as mentioned above already. Such temples are Kubyāukki, Nanpaya, and Manuha—all in Pagan They were built in the 11th century A D and are typically Mon Some of them have the perforated stone-windows, a feature is also noticed in some

of the temples at Bantey Srei near Angkor Vat In Kubyāukhi we also notice some paintings, which have their legends written in Old Mon The ground plan of the famous Ānanda temple at Pagan is made after a Brahmanical temple in Paharpur in East Bengal Even the lower part of the spire is modelled after a *śikhara* in a Hindu temple in eastern India Another temple, called by name Nat-Hlaung-Kyaung, is the only existing Hindu temple, though now in a dilapidated condition, dedicated to God Visnu There were, it is said, images of all the ten Avatāras, but now not much of it remains This is, perhaps, the earliest surviving monument of Pagan

In Thailand also, at Chieng-mai in the extreme north-west of Thailand, we have the temple of Wat Ced yod, with its tower like that of Buddha-Gayā temple Artists and engineers were specially sent to India and then this temple was built On the outer sides of the dilapidated walls of this temple are seen recesses round about in which we find figures standing as we do see in Indian temples There are different styles of spires noticed in this town Vat Ku Tao is an old temple, the spire of which consists of what appears to be a vertical pile of huge earthen jars, the jars diminish in size as they go up On each side of these jars is the figure of the Buddha This type of a spire appears to be very rare There is another temple Cedi Sehum by name, which appears to be a Hindu temple converted into a Buddhist temple, as the spire appears to be entirely a *śikhara* of a Hindu temple At the entrance of the premises of this temple, there is a sign-board in Thai langauage, which prohibits women from entering the temple This reminded us of the Kārtikaswāmī temple on the Parvatī hill of Poona, where women are not supposed to go At Vat Chieng-man, we were shown a figure of the Buddha placed in a specially prepared casing It is not ordinarily exibited as it is considered to be very rare, being specially procured from India It is a standing Buddha flanked on one side by a sitting elephant and on the other by a child holding aloft what appears to be a wheel in his right hand On both sides of his face there is an inscription carved in some indistinct letters in old Nāgarī letters

Till about 13th century, Thailand or Siam had no separate existence of its own The northern and western parts were occupied by the Mons and all southern parts up to its centre along with modern Cambodia was included in what was then called by the name of Funan This region was already considerably influenced by the Brahmanical culture of south India Tradition has it that an Indian, Kaundnya by name, came from India, married a local princess and continued to rule that country It is also related in Chinese records, that a successor to him sent an embassy to India by the middle of the third century A D From what we see of the old traces of early Buddhism at Nakhon Pathom (Nagara Prathama), it appears that the Mons had brought the same to this country, and, perhaps, this was the first place in south-west Thailand where they introduced their religion We have here stone *dharma-cakras* and inscriptions in old Indian script giving the Buddhist formula "*Ye dhammā hetuppa-bhavā*" There are stone-figures of Deer symbolical of the Deer-forest at Sārnāth They have preserved trees which are called Rājīyatana, Nigrodha (Banyan tree), Bodhi tree, mango and *sāla* trees A flat slab of stone used in ancient days as a *gandi* to call meetings of the monks is preserved here It has a ringing sound and even now in Burma in Buddhist temples flat slabs of brass made after the same model are found to be placed On the walls of the temple are found gāthās from *Dhammapada* written in old Khmer script In this region are also found the statues of the Buddha standing, or sitting as on a chair (*Litasana*) after the model found in some Indian caves, or statues with garments transparent in the Gupta style of India About the sculpture in this land of Thailand or Siam, Reginald Le May, author of "The Culture of South-East Asia" remarks (p 63 of 1954 edition) "All the sculptural influence brought to bear upon the peoples inhabiting Siam in historic times has come either directly or indirectly, from India" The beautiful figure of a Bodhisattva, possibly Lokesvara,

now in Bangkok Museum, but originally discovered at Chaiyya in the extreme south of Thailand, with its *tribhanga* posture, suggests its Indian original discovered in works of art, either of sculpture, or of painting as in Ajanta As said above, there are statues of Hindu gods also Not far from Nakhon Pathom, there is a solitary image of Ganesa with only two arms A similar one with two arms only is also found in the Museums of Ayuthia and of Vientienne, the administrative capital of Laos The latter is a standing image In the Museums of Bangkok, Pnompenh, the capital of Cambodia, and Saigon we find several statues of Vishnu or of Harihara in south-Indian style There are also found Śivalingas scattered all over south-east Asia In Chaiyya was also discovered a *mukhalinga*, now kept in the Bangkok Museum Phra Paramadhātu is a temple in Chaiyya, perhaps the only one of Śhrivijaya style In the city of Bangkok, on the main Siriphongs road, are three Hindu temples of Ganesa, Visnu and Śiva Their worship is in the hands of south-Indian Brāhmans, who are carrying on their worship in Indian style, although they have married local women At Lopburi, there is a temple dedicated to the worship of God Visnu with a turban on his head and local women are found to be worshipping the image in their peculiar way of pasting thin gold leaves on the image and burning candles before the image This custom of pasting thin gold leaves is also found among the Burmans and the present writer found that such thin gold leaves, 100 in number, were available for Rs 7 and 12 annas in Burma at that time (1953) At Ayuthia in Thailand, there are also three Brahmanic temples side by side and there is an inscription of quite recent date (about 1905-06) which records the visit of the then ruling Thai king to these temples These temples are in the style of the *gopuras* of south India

In Bangkok on the walls of the royal temple of the Emerald Buddha, we have the whole story of *Rāmāyana*, according to the Thai version of the same, painted Ravana is shown there with his ten faces arranged vertically, one each at the base and at the top, and two side by side at intermediate stages This way of representing the faces of the Rāvana is found also at Bantey Srei, near Angkor Vat where on the top of a low entrance to a temple is carved the figure of Rāvana with seven faces visible, two side by side at three different stages, one at the top and the other three are supposed to be at the backside Here Rāvana is represented as shaking the Kailāsa mountain, where Śiva and Pārvati are shown to be sitting The story of *Rāmāyana* as corrupted in south-east Asia is also found in the paintings on the walls of temples in Vientienne and Luangprebang in Laos In this corrupted story, Sītā is represented as a daughter of Rāvana who, after some years does not recognise her and attempts to woo her

At Anglor Vat, in the extreme north of Cambodia, near the border of Thailand, there are huge massive stone temples dedicated to Visnu or Śiva These are made of stones piled one upon the other, without any use of cementing mortar They have enormous length and breadth—the enclosing walls around the lakes encircling the temples are about a mile each These temples have high colossal towers, sometimes reaching the height of as many as 150 feet, on the top of the main shrine containing the image, reached by a very long and dangerously narrow, slippery flight of stairs. There are scores of temples in this area and a visitor is struck with wonder at the gigantic scales of every feature of these temples. There are galleries about three-fifths of a mile, on which the stories of *Rāmāyana* or *Mahābhārata*, or *Purānas* are found relief We may find that the story of the abduction of Sītā, or of a visit to her by Hanumāna or the fight between Vāli and Sugriva, or the story of Gajendramoksa, or the story of the churning of the ocean, gods and asuras, flanking the churning rod, about fifty feet each side Here also Rāvana is shown with his faces in a vertical arrangement, three on the lowest level, three on the next higher, and one on the topmost level, three others being on the backside, which obviously the artist cannot show These temples belong to 11th century A D onwards,

and the main images in the sanctum varied according to whims of the ruling kings If he happened to be a follower of Buddhism, he would not hesitate putting an image of the Buddha in the place of that of a Hindu deity Really, these temples deserve to be called "Wonders of the World" In Ponagar, near Nhatrang, in the south-east corner of Indo-China, there are remains of Śiva temples, or temples dedicated to Umā, with inscriptions in old Nāgarī characters on the sides of the entrance Sometimes the inscriptions are written in old Pallava script and the era used is the Śaka era This south-east corner of Indo-China represents the old kingdom of Champā and the people are called by the name of Chams The oldest Sanskrit inscription on stone discovered so far in Indo-China goes back to the third century A D

Customs

Some Indian customs are observed in these countries of South-East Asia It is the practice in Burma, Thailand, Cambodia and Laos that every male person must, at some time or the other in his life, go to the monastery and live there the life of a monk Apparently, this is meant to imbibe in oneself the discipline involved in the plain and simple life of a monk The present writer has met a young naval officer and a young radio announcer, both from Burma, working respectively in Bombay and New York, donning the monastic garb They explained to him that they had adopted that kind of life, only for a few days, according to the prevailing custom in their families, and they expect to return to the family-life after the stipulated period This custom of accepting the monastic life is called *Shinpew* and it is celebrated with great *eclat* The young boy wears rich ceremonial dress with a coronet on his head and, if the boy is small, is carried on a horse-back in a procession throughout the town before he accepts the monastic life The day is celebrated with rich feasts and loud music Even the King of Thailand, we read in papers, had some years back accepted monastic life. This period is often limited to three or four months of the rainy season, if not more This practice of going to monasteries and studying sacred texts there under the guidance of a monk-teacher corresponds to the old Indian custom, prevalent among the people of the three upper classes in Indian social system, the Brāhmanas, Ksatriyas and Vaisyas—the custom called by the name of the *apanayana*, approaching a teacher for study He stays with him for years together and then after completion of his studies returns to his family Similarly, among girls also there is the custom of ear-boring This is also celebrated with great pomp especially among high rich families in Burma and Thailand

In Burma, the *Mesa-samkrānti* day, the day when the Sun enters the Zodiac sign of *Meṣa* (Aries), is celebrated on a very large scale It is called the water-festival and is observed on 13th to 15th April for three days At present the Burmese Government also celebrates it as a national festival All men and women, young and old, throw water on each other and move about in large festive gatherings, singing songs and merry-making Buddhist monks are of course an exception and nobody bothers them The singing parties are carried on floats or trucks decorated with ornamental faces of different animals, throwing water from their can-reservoirs on people round about Even hose pipes connected with the water-carrying pipes of the town are used to throw water on each other It is very difficult to walk on streets without getting drenched and nobody minds it This custom was also prevalent in Thailand and possibly it still exists in northern Thailand, though not on a large scale Does this not remind us of our *Holi* festival, when Indians throw coloured water or coloured powder on one another and move about in merry-making parties all over the town, singing and dancing ?

In Thailand until a few years ago, and in Central Vietnam even now, the practice of preserving a tuft of hair on the top of the heads of young boys was and is common among the villagers, as we find among the Indians also as it was in towns until recently, and is even now among the farmers In Thailand

PLATE F

Hari Hara

Illustration from Jñānesvarī

Śaka 1685 (1763 A. D.)

and Cambodia, among the upper classes on ceremonial occasions, and among the villagers, there is the practice of using the lower garments in the *sa-kaccha* fashion of northern India So also do the Brāhmans called Pāragū (*Pāraga*, experts in their lore) in Cambodia, who are now invested with the charge of guarding the royal sword These Brāhmans, though married to local women, still observe certain days as holy days and abstain on those days from meat-eating In Thailand, we were very agreeably surprised by the utterance of the word *Svadhi* with which people greeted each other when they met It corresponds to Indian "*namaskāra*" or "*namaste*" It corresponds to Sanskrit *Svasti* In Laos, they use *Sabāy* (*sappāya*, agreeable) as they meet and *svasti* as they depart after meeting Among the Chams, who have now turned Muslims, there is a sacred text which begins with *svattik* and *sidhik*, which are nothing more than *svasti* and *siddhi* Tattooing seems to be a very common practice in Thailand and Laos and we have seen even Buddhist monks having sacred passages from Buddhist texts tattooed on their lower arms

While offering homage to the sacred images of the Buddha, they kneel down and offer candle-sticks or incense-sticks which they keep burning In one of the temples dedicated to a marine deity in Saigon, we were surprised to find, hanging from the ceiling, thick, sweet-scented, spiral incense-sticks, which keep on burning for months together Faithful devotee-customers are asked as to what kinds of incense-sticks they would like to purchase—those that would last for two months, three months, or six months In Theravāda temples shoes are not permitted, while in the Mahāyāna temples of the Chinese in Saigon, one can approach even an image of the Buddha with shoes on *Uposatha* days, the eighth of each fortnight, fourteenth of the dark half and fifteenth of the bright half, are spent in monasteries Laymen wear special dress on that day Some use dark chocolate-coloured-clothes, while in Laos white clothes seemed to be preferred People are found to be counting the beads of rosaries, which they use on that day Sermons are being delivered which laymen attend to in large numbers Sometimes people go with their lunch, feed the Buddhist monks, and spend the whole day in monasteries listening to the sermons In Vietnam, death-anniversary is observed, like Indian *Śrāddha* day, and Buddhist monks and friends and relations are fed on that day In Thailand, there was the swing-festival, which seems to be falling now in the back-ground In Bangkok, in a main square, there are two huge pillars with a cross-beam on the top, to which ropes were tied for making a swing and people used to have the sport of taking swings This corresponds to Indian swing-festivals, which are observed in certain parts of India round about Nāga-pañchamī day People have faith in astrology and palmistry and books on the same written on palm leaves, or on white cloth also, are found in north Burma and Laos , but there are now very few people left who can read those books

Languages

Lastly, we come to the linguistic evidence The language of the Burmans really belongs to an altogether distinct group, that of the Tibeto-Chinese But on account of the language of Pali which has become the sacred language of the Buddhists, so many Sanskrit words, though in a corrupt form, are being used by the Buddhists Sometimes, it is found that though the Buddhists may be writing the word correctly, they would pronounce them in their own way Just as the Bengalis often write the word *Ksamā* properly, but they would pronounce the same as *Khamā* The same thing happens with the Burmans, Thais, or Laotian people The words "sutta" "sāsana" and "Sangha" are pronounced by the Burmans as "tutta" "tātana" and "Tangha", respectively "Siri" is pronounced as "thiri" "Citta" becomes "set"'and "sacca"' becomes "tissa" "Canda" becomes "sanda" Sometimes words are abbreviated "uposatha" becomes "ubo" and "kusala" becomes "kuto" "Ra" is pronounced as "ya" and so "ārāma" becomes "āyo" Even names of certain towns seem to be corruptions of Indian names Tenasirim seems to have been derived from Tenāsri or Dhanāsri

In Thailand, particularly, we have a host of names of towns, which are clearly derived from Indian names Ayuthia, Lopburi, Thonburi are respectively Ayodhyā, Lavapuri and Dhanapuri Sukhothai, Phisanuloka, and Sonkhaloka are respectively Sukhodaya, Visnuloka and Svargaloka In Thai language, certain sounds represented by the third and the fourth letters of the first five pentads of Sanskrit alphabet are missing and they, therefore, use the second letter for the third or the fourth letters of the pentad For instance, "giri", a mountain, becomes "khili" While the present writer was travelling in a railway train with a Buddhist dignitary of the Ministry of Religion, he was looking out of the window After some time, he came back running towards him saying "*Kho upahato, Kho upahato*" He could not make out what he meant to say When he himself looked out, he found that a cow was struck down by the engine of the train and then he could understand that the dignitary's "kho" meant "go", a cow A cow was struck down Bhāsā becomes "phāsā" For "va" we get "pha", and so "vanik" becomes "phanich" and "vamsa" becomes "phongs" The members of a conjunct consonant in Sanskrit are pronounced disjunctly, so "sthāna" becomes "sathāna" "bhiksu" becomes "phikasu" Once we were introduced to a lady from Thailand, who presented to us her name-card, on which the name was spelt as "Kaseima" We could not exactly get the import of that name and we were left guessing how a Muslim lady "Kāseima" by name could have come to attend the gathering which consisted of Buddhists Later on, when we came to know about the peculiarity of reading disjunctly the members of a conjunct consonant, then we came to know that the name was no other than Ksemā or Khemā in Pali, which, as we know, is a famous name of a Buddhist Bhikkunī For "pa" we often get "ba" So "Pāli bhāsā" becomes "Bāli phāsā" "A" is pronounced like Bengali "a" as "ŏ" Final "ra" is often changed into "na", so "nagara" becomes "nakhon" , Final conjunct consonant is often simplified into a single consonant "Vimutti" and "Visuddhi" become respectively "Vimut" and Visud" Sometimes the last letters are dropped and the word is abbreviated "Śilpa-karana" and "Vaidyakarana" become "śilpa-kon" and "Vaithya-kon "

In the same way, we will find corruptions of Sanskrit words in Cambodian and Laotian languages, as will be seen from the following list —

Sanskrit	Cambodian
Devatā	Tevodā
Vimāna	Phimean
Brahma	Prohm
Nagar	nakhon, anghor
Dhāma	thom
Narottama	Narodam

Sanskrit	Laotian
Dhātu	that
Yaksa	yak
Vijjullatā (Pali word)	visulatā
Giri	khili
āgacchantu	āgasantu
Śri	Si
Sangha	Sankha

As the Vietnamese language belongs altogether to a different group, being derived from Chinese, it has no relation basically with Sanskrit But on account of the use of Sanskrit words in Buddhist books, some words are bodily taken The prayers of the Vietnamese often begin with *Namo* Words like *Amitabha* are found used by them

Thus, from the evidence cited above, are we not justified in saying that Indian culture spread to these countries of South-East Asia and that India had considerable share in determining the common cultural affiliations of all these countries in South-East Asia ?

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A 2313—18 B

Kapola-Pāṭana

By
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IN a short note appearing in the *Indian Historical Quarterly*, June 1957, pp 139 ff, Dr V S Agrawala has shown how the passage *kapola-pātan-ādeśi* has been wrongly read by some commentators as *kapola-pāṭal-ādeśi* in the following stanza in Kālidāsa's *Raghuvamśa* (IV 68) —

Tatra Hūn-āvarodhānām bhartṛṣu vyakta-vikramam | Kapola-pātan-ādesi babhūva Raghu-ceṣṭitam ||

The poet says here that the invasion of the Hūna land on the Vamkṣu river (i e the Oxus) resulted in the destruction of the Hūna chiefs and the consequent scarification of the cheeks of their wives

Agrawala draws our attention to the commentaries on the *Raghuvamsa*, according to which the word *pāṭana* means *vidāraṇa*, *kuṭṭana* or *nakh-otkarṣaṇa* and which refer to an interesting Hūna custom in passages like *Hūna striyaḥ kapola-pātana-pūrvam rorudant = ītad deśācāraḥ, pati-vadhān=nāryo rudatyaḥ kuca-kapolam nakhair=vidārayanti, pati-vadhat=tatra des'e striyaḥ kapolam nakhair=vidārayant= ītir tiḥ,* etc It will be seen that, while Kālidāsa and some of the commentators speak of the scarification of the cheeks of the Hūna widows, others mention their breasts along with the cheeks According to some commentaries, the pricking of the cheeks and breasts of the Hūna women was done by them with their finger nails

Our attention has also been drawn by Agrawala to what Stanislas Julien says on this Turkish custom on the authority of Chinese accounts "It is said that they go round their tents making dolefulamentations and prick their faces with a knife so that one sees blood flowing with the tears" The reference here is to the scarification of the faces (i e cheeks) by means of a knife and not of the cheeks and breasts with finger nails But there is no doubt that the same custom is indicated

Further information on the custom is supplied by the recently discovered Paschimbhag (Sylhet District, East Pakistan) copper-plate inscription of king Śrīcandra of the Candra dynasty of South-Eastern Bengal, who flourished in the tenth century A D A tentative transcript of the inscription has been just published by Mr Kamala Kanta Gupta, an advocate of Sylhet

The correct reading of a verse in the description of Śrīcandra's military achievements runs as follows —

Santosam Rana-devatān=gamayatā viry-āva-dānair=nijair—nunmṛṣṭam Yama(va)nī payodhara-taṭe patr-āngule-mandanam śoka-pracchana-jarjaram viracitam Hūṇi-kapol-odaram yen=onmūlitam=Utkale-nayanayos =tāli-surā-ghūrnitam ||

Reference is here made to three interesting practices popular among the women respectively of the Yavana, Hūna and Utkala peoples The custom of the Yavana girls was to draw lines of painting on their breasts with coloured sandal wood or saffron paste or any other fragrant substance, while the Utkala women are represented as addicted to toddy But we are concerned here with what has been said about the Hūna women We are told that they made their cheeks and belly *śoka-pracchana-jarjara* in which *jarjara* means 'wounded' and *pracchana* is used for *pracchāna* or *pracchita* in the sense of 'scarification' Thus *śoka-pracchana-jarjara* suggests that aggrieved Hūna women scarified their cheeks and belly

It appears therefore that the Indians of old had information about an interesting custom prevalent among Hūna women, according to which they mourned the loss of their husband by scarifying their cheeks, breasts and belly by means of their nails

The Kākatiya Coins

By

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THE defeat of the Western Chālukyas at the hands of the Imperial Chōlas in the maritime Āndhra in 1135 A D , and the death of Sōmēswara III a few years later 1139 A D let loose the latent forces of disintegration and the Chālukyan empire began to fall rapidly to pieces In the general scramble for power, the feudatories looked after their own interests and each attempted to grab as much territory as he could lay hands upon It was at this political juncture that the Kākatiya Prōla II (C 1090-1117 A D —1158 A D), son of Bēta II (C-1075 A D —1090 A D), who started his career as a subordinate of Western Chālukya Vikramāditya VI (1075 A D —1125-26 A D), rose to a position of eminence and established an independent Kākatiya Kingdom During the supremacy of Rudradēva (C-1150 A D — 1195-96 A D), Ganapatidēva (1198-99 A D 1262-63 A D), Rudramāmba (1259 A D 1295 A D) and Prātapa-rudra-dēva (1295 A D 1323—26 A D) the power and the prestige of the Kākatiya dynasty was extended far and wide In the years between 1309 A D to 1323 A D , Warangal, the capital of the Kākatiyas, was converted into a battle-ground As a consequence of that the glory of the dynasty was dashed to the ground and their Kingdom was destroyed and dismantled

The Kakātiyas were one of the major dynasties that exercised their sway, approximately for a period of three hundred and twenty-five years, over the whole Telugu speaking region They were great builders, promoted education and learning, encouraged irrigation and fostered trade and commerce

Sporadic allusions to coins which are scattered through the vast mass of inscriptions and literary works would naturally indicate that there were in circulation a large number of coins of different denominations in the Kākatiya Kingdom

The inscriptions refer to coins, *viz* , *gadyāna*[1], *gōkana-gadyāna*[2], *civavādi-gadyāna*[3], *Kēsari gadya*[4], *ruka*[5], *gōkana-sīnaga-ruka*[6], *Kaduni-gōkana-sīnga-ruka*[7], *gōkana-ruka*[8], *mada*[9], *badi-māduvu*[10], *māda-badi-pātuka*[11], *badi-māda*[12], *cinna* or *cinnamu*[13], *Paidi-guddali-cinna*[14], *tanka*[15], *visa*[16], *Kēsari-visa*[17], etc

The region between the Gōdāvari and Pennār rivers during the 12th to 14th Centuries was divided into numerous petty principalities and ruled over by many minor dynasties owing allegiance to the Chālukya-chōlas, Western Chālukyas and the Kākatiyas from time to time The Telugu Chōlas, Pallavas, Yādavas, Tyāgis, Kāyasthas, Chālukyas, Haihayas, Kōtas, Kolanurrāndalikas, Nātavadis, and Gōnas were some of them The inscriptions issued by them also abound in

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1 *SII*, X, Nos 443 and 445, *AR*, 533 and 539 of 1913,

2 *Ibid*, No 244, *AR*, 576 of 1925

3 *HAS*, No 13, p 53

4 *SII*, X No 302, *AR*, 862 of 1922, 295 of 1936-37.

5 *HAS*, No 19 Mn 10 *VR*, II, p 884, No 92-A

6 *Ibid*, Mn 2

7 *Ibid*, Mn 13

8 *SII*, X Nos 351 and 352

9 *SII*, X, Nos 473 476 and 469, *AR* 180 of 1905, 610 of 1909, 296 of 1924, *HAS*, No 19, Km 7, Mn 7 and 31 Wg 13

10 *HAS*, No 13, p 202

11 *Ibid*, No 19, pp 166 and 167

12 *Ibid*, Km 6

13 *Ibid*, No 13, pp 61 and 89, *Ibid*, No 19, Km 6, Mn 21

14 *HAS*, No 19, Kn 2

15 *Ibid*, Mn 43, *VR*, II, p 884, No 92-c

16 *HAS*, No 19, Mn 7

17 *SII*, X, Nos 358 and 429, *AR*, 391 of 1915, 1926 of 1905

references to the varieties of coins that were in vogue during the period under our survey

Thus the *gadya*[18], *Rājānārāyana-gadyana*[19], *birudu-rūka* [19A], *Tyāgi-gadyāna*[20], *Vamsa varddhana-gadya*[21], *birudu-gadyāna*[22], *bhuja bala-māde*[23], *birudu-māda*[24], *uttama-ganda-māda*[25], *Chāmara-māda*[26], *gandhavārana-māda*[27], *gandha-hasti-māda*[28], *Rājarāja-māda*[29], *Kulottunga māda*[30], *ganda-gōpala-māda*[31], *Nandi-māda*[32], *rūka-māda*[33], *varāha-rūka*[34], *jaya-māda*[35], *nishka*[36] *duggāni*[37], *Nellōre-pudu-māda*[38], *Nellōre-mādai* *jadya*[40], *Kāsu*[41], *Varāha*[42] and *cinnam* [43] are figured in the inscriptions

The literary works of the period also allude to coins, namely, *rūka*[44] *māda*[45], *ōli-māda* *suvarna*[47], *cinna*[48], *Kāsu*, *arē-kāsu*, *visa* and *ara-visa*[49] We are even informed that there were bad or counterfeit coins in circulation[50]

The inscriptions and literary works, though enumerate a large number of coins with their respective names, their weight and value are veiled in obscurity Gadyāna may be a gold coin whose value is not known[51] Gadena mentioned in the inscriptions appears to be the colloquial form of gadyāna[52] and 'ga', and 'gadya' are its short forms The gold coin assigned to Ganapatidēva is stated to weigh 56 25 grains which is approximately the weight of a gadyāna in the pre-Vijayanagara period[53] Prof K A N Sastri observes that the gold gadyāna of the Deccan averages 58 grains, the heaviest reaching 60 1 grains[54] On the analogy of Krishna-rāja-rūpaka[55], Vigraha-dramma[56] and Kumāra gadyāna[57], it may be surmised that the Gōkana-gadyāna and Rājanārāyana-gadyāna denote gadyānas struck by Gōkana (Gōkarna Telugu-chōda chief) and Rājanārāyana respectively Tyāgi-gadyānas were probably struck by the Tyāgi chiefs of Gudimetta (Gudimetla) Ciravādi

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18 *SII*, X No 57, *AR* 711 of 1920

19 *Ibid*, Nos 108 and 216 *AR* 705 and 709 of 1920

19 A *SII*, IV, Nos 992, 994 and 995, *AR*, 167, 169 and 170 of 1893

20 *Ibid* No 153, *AR*, 713 of 1920

21 *AR*, 472 of 1940-41

22 *AR*, 165 of 1897

23 *AR*, 610 of 1907 *Epi Ind*, X p 129

24 *SII*, X No 128, *AR*, 330 of 1919

25 *Ibid*, Nos 78 80, 81 and 88, *AR*, 817 of 1922, 814, 815 and 820 of 1922

26 *Ibid*, VI No 170, *AR*, 210 227 and 230 of 1897

27 *AR*, 212 and 232 of 1897, *VR*, II p 753, No 69

28 *Ibid*, 234 of 1897, *VR*, II, p 753, No 71

29 *SII* X Nos 115 and 145, *AR* 847 and 848 of 1917

30 *Ibid*, No 229 *AR* 855 of 19,7

31 *Nel Insc*, Kandudūr, No 56

32 *AR*, 380 of 1905 *VR* III p 1687, No 201

33 *SII*, X No 5 *AR* 707 of 1920

34 *Nel Insc* Kāvali, No 23

35 *AR*, 151 of 1897, *VR*, II, p 755 No 90

36 *SII*, VII, No 737, *AR* 113-A of 1902

37 *Nel Insc* Kandukūr, No 43

38 *AR* 441 of 1919

39 *Ibid* *JAHRS* XXV p 125

40 *JAHRS*, XXV, p 82

41 *AR*, 433 of 1911, *VR*, I, p 655, No 879

42 *AR*, 340 of 1938-39

43 *Nel Insc*, Nellōre, No 31, *VR*, II p 1117, No 505

44 Kappura bhōgi vemtakamu Kammani-gōdhuma-pimdi-vamtayun guppedu-pam hadārayu-nu grottage= Kāchina-Yala-nē-pesarppappunu Kommunallati-pamdlu-ōda grom-berugu *Kridābhiramamu* p 54

45 *Mādalu* tumemdu māku-gāvalayu-Palanati-vira-*charita*, p 42

46 nā-mēna-māmālu da-pemdli-nādu mā-Kulambula-*ōli-mādalu*-galavu tagina-dhanambika-ti mēya-maniri *Ibid* p 42

47 Nila-na=Yodhya-yu-dakka-nella-nella-dēsamulan = alari-inchchina mudamamdi-ruthvijulu

Yeppdu-vēludumu-nivichchina-dēsamu=yeppuduanu = shtānimu—rēmu salpudumu

Yērēda-dēsambulu=Yēlutaleda bhumika velummu-bhūmīsa-mākun=ananudh-badi-kōtulu-agu-*suvarnamulu*
Rangānatha-Rāmāyanamu, p 14

48 Chanina bhūpatutlu=Yella samakurchinatti Chitramau dhanmutōn=*cinnamu*=yēmaina gonipōyira-vemta gurppamgan—vēla
Palanāti-vira charita, p 41

49 *Visapu* mukku-nattu *aravisapu* mamgala-sūtram amminan

Kāsunu-rāni Kammalu=*arakāsunu*-rānivi-pachcha-pūsalun *Kridābhiramāmu* Intro p 69

50 *Pollunu-tālunu* posagavu māku *tēraina mādalu* dechchi-immanna
Palanāti-vira-charita, p 42

51 It has been defined by Bhāskarāchārya as equal in weight to 48 ratis or nearly 85 grains It was equal to two Kalānjus, and Kalāuju was a gold coin weighing about a quarter of a tola
(Līlāvati, Chap I V 2 *Studies in Indology*, III, p 145, C II, IV-I p cl XXXIII)

52 *HAS*, No 13, p 203

53 *Ind Ant*, LVI, p 192, *AR*, 1936-37, part I, p 66.

54 K A Nilakanta Sastri *South Indian History*, p 327

55 *Epi Ind*, XXX, p 232

56 *Ibid* I, pp 175-76

57 V V Mirashi *Studies in Indology*, III, p 145.

gadyāna was probably a special kind of gadyāna and it is not possible to ascertain its weight or value in the present state of our knowledge Birudu-gadyāna, which seems to be another varient of gadyāna, was struck in gold[58] The coin, rūka seems to be a very common coin of the time[59] The *Kridābhirāmamu* gives a fair idea about the value of a rūka in our period It states that at the cost of one rūka all the items of food were served in a hotel at Warangal[60] Gōkana-singa-rūka and Kōdūri-gōkana-singa-rūka were the varients of rūka The former appears to be struck by Gōkarna and had the device of singa or a lion on one of its sides, and the latter may also be the same as the former but issued from Gōkarna's capital-Kōdūr[61] Birudu-rūka was probably another type of rūka which bore some special titles[62] Sirasū-ruka is a coin of unknown value The māda was the most used of all the coins of the time[63] It was struck in silver and gold, and figures in many kinds of transactions[64] Thus an inscription found at Diākshārāma records that the Rattadikamu of a village was sold for 127 mādas[64-A] Rājarāja-māda, Kulōttunga-māda and Ganda-gōpāla-māda were probably issued by Rājarāja, Kulōttunga and Ganda-gōpāla respectively Prof K A N Sastri states "With the growth of the Cōla empire the currency system of the Cōlas extended over the whole empire including its feudatory provinces The new standard was adopted for instance in the Vengi country about 1000 A D "[65] This may be the reason for the prevalence of Kulōttunga-māda, Rājarāja-māda, etc , in the Telugu country Jaya-māda, birudu-māda and bhujabala-māda were probably struck to commemorate victories and birudas of the issuer The Chāmara-māda may be a temple coin having the figure of a fly-whisk The ōli-māda or ōli-mādalu were possibly offered at the time of a marriage to the bride-groom by the father of the bride in dowry[66] The value of the gandhavārana-māda is not known, but from the name, it may be supposed that it was another variety of māda which probably had the device of 'Gandhavārana' (outraged elephant) It was struck in gold[67]

The *ranka* was another popular coin of our period This appears to have been generally used for the valuation of lands Thus the Umāmahēsvaram inscription records the purchase of 2 plots of land for 80 tankas and 30 tankas, respectively[67-A] The Nishka and Suvarna seem to be gold coins The Varāha was another coin whose name appears to have come down from the Chālukyas who had the varāha lāñchana or boar device on their coins[68] The coin, namely, cinam was probably a token coin of the time and most widely used by the populace It was struck in gold, silver and as well as in baser metals[69]

The Kāni may be the same as old Kāni having the value of $\frac{1}{4}$ of an anna We do not know the value of rūka-māda, Kēsari-visa, Kēsari-adduva, palampullai-mādai, plavanna-mādai and Jadya

58 *AR*, 165 of 1897, *VR*, II, p 746, No 2 An inscription found at Hōlal (Bellary District) records that one Padoja made four Sikhara-pillars with decorations each costing 20 gadyānas (*AR* 483 of 1914)

59 *JAHC*, IV-Nos 1 and 2, p 27

60 *Kridabhiramamu*, p 54

61 In the inscriptions found at jedcherla Gokarna is styled as '*Kōdūri-pura-varā-dhisvara*' HAS, No 19, Mn 12 and 13

62 *JAHC*, IV, Nos 1 and 2, p 27

63 Māda may be equal to $\frac{1}{2}$ pagōda, i e , 2 rupees Four madas constituted one carsam In revenue '*mādalu-cellimchuta*' is payment of 50 per cent or half the sum due, as an instalment of rent Colloquially 'mādalu' means money in general (HAS, No 13, p 206, *JAHRS*, XXIV, p 79)

64 *JAHC*, IV, Nos 1 and 2, p 27

64-A *SII*, No 1186, *AR*, 309-A of 1893

65 K A N Sastri *The Cōlas*, II-I, p 451

66 *Palanātivira-charita*, p 42

67 *VR*, II, p 753, No 69 The Birudu-gadyāna, Uttama-ganda-māda, Burudu-māda, Jaya-māda, and Kulōttunga-māda were struck in gold (*VR*, II p 746 No 2, p 747, No 12 and 13 p 750, No 45, p 755, No 90)

67-A '*HAS*, No 19, Mn 43 According to an interpolated verse in the *Litavati* of Bhāskaracharya, a tanka was equal to $\frac{1}{4}$ gadyāna, *i e* , 63 grains in weight (*CII*, *IV-I*, p Cl XXXIII, f n 3)

68 K A N Sastri *South Indian History*, p 19

69 *HAS*, No 19, Kn 2, *JAHC*, IV, Nos 1 and 2, p 27

Very few Kākatiya coins are discovered When viewed with the material gleaned from the inscriptions and literature, they are very meagre and scanty Six Kākatiya coins are brought to light so far, of which five are copper and only one in gold, and assigned to Pratāpa-rudra dēva (?) and Ganapatidēva respectively These are as follows —

No 1 Ganapati-dēva

Gold coin, shape circular, diameter 81″, weight 56 25 gr It was found in a treasure trove at Kavaiyadavalli, in the Ātmakur taluk of Nellōre District On the obverse, there are the words "*Śri*" on either side of the horizontal diameter, with the letters "(*Ka*) *ti*" on the top, and "*Gana*" at the bottom, in old Telugu script The interspaces are filled by figures of lions, each with an open mouth, raised paws, and a twisted tail The legend and the figures are punched on the coin The reverse is blank[70] Sri Sreenivasa Raghava Ayyangar identified it as a coin issued by the Kākatiya Ganapati-dēva

No 2 Pratapa-rudra-dēva

Metal—copper, shape circular

Obverse—couchant bull

Reverse—Devanāgari legend

'Śrimāt——ka——kākati——Pratāpa Ra——ya', and alternatively as, 'Kākata——Saka——2'[71]

No 3

Metal copper, weight 125 5 grains, size 82″ diameter, shape circular

There are no figures and symbols of any type either on the obverse or on the reverse, excepting legend in the Dēvanāgari script

श्रीमद विक्रम काकतीय प्रतापरुद्र देव विजय कटक (१२?) सक

(Śrimad Vikrama Kākatiya Pratāpa-Rudra-Dēva Vijaya Kataka (12 ?) Śaka [72]

[70] *Ind Ant*, LVI, pp 191-93, Pl or page 185, No 8, *JAHRS*, 144

[71] E W Elliot, *South Indian Coins*, p 85, *JAHRS*, *Kākatiya-samchika*, p 227, *ff*

No 4.

Metal copper, weight 140 grains, size 0 8" diameter, shape circular.

Same as above, but there is a slight variation in the left end

'श्रीमत काकतीय प्रतापरुद्र देव विजय कटक —

Śrimat Kakatiya Pratap-Rudra Deva Vijaya Katak—[73]

[72] *JHSI XXI—II*, pp 181 tt, pl XI, 5, 5A, 5B Sri S Ramayya who studied the coin in question states that it was issued by Pratāpa-rudra-dēva II when he became a vassal of Delhi It is further suggested that *Pratāpa-rudra-dēva had to give up Hindu symbols and* issue his coins on the Muslim model with legends on both the sides (*JHSI XXI*-II p 184) This statement is wrong for there is no evidence to support that Pratāpa-rudra-deva reigned after his final defeat at the hands of Ulugh Khan In the Vilā a grant of Musunūri Prālaya Nāyaka (C A D 1330) it is stated that Pratāpa-rudra-dēva while being carried away as captive to Delhi died on the banks of the river Sōmōdbhava *i e* Narmada (*AR* A -5 of 1938-39) His death does not seem to have been the result of natural causes, for according to the Kaluvachēru grant of the Reḍḍi Queen Anitalli, dated A D 1423, he departed to the world of Gods by his own desire (*Tāsmin Pratāparudrē Svasthānam svechchhayaiva Yātavati* *JTA*, II p 106) Apart from the Muslim rulers some Hindu Kings also issued coins bearing legends on both obverse and reverse (C J Brown *Indian Coins* Pl III No 9 *Studies in Indology* III p 132) Above all, how could the Muslims, after defeating, Prataprudra allow him to issue coins in his own name ?

[73] *Ibid*, pp 137 tt, XXI-I, Pl IV 6-9

Sri Dinkar Rao attributed this Coin to the Rāṣṭrakūṭa Karkkarāja II and read the leged as follows —

श्रीमदेवर काकराय धी यरु उदव त्रिजय करवु—

Dr D C Sarkar corrected the reading of Dinkar Rao (see above No 4) and assigned the coin to Kakatiya Pratap-rudra-deva He observes that the characters or the legend are in Southern Nāgari type of about 12th of 13th Century A D Kakka II was the last of the Imperial Rāṣṭrakūṭa ruler and ruled only for about a year before he was overthrown by Tailapa II, the founder of the Later Chāļukya dynasty of Kaļyāna The fortune of the imperial Rāṣṭrakūṭas was at lowest ebb at the time of Kakka II and we have no coins issued by the mighty emperors of the house such as Gōvinḍa III, Indra III and Krishna III It is difficult to believe that the Rāṣṭrakūta ruler Kakka ever issued any coins at all (*JNSI, XXI—II*, p 137)

No 5

Two copper coins of this type are known They are thick round pieces, having about 0 8 inch diameter and exactly similar to coin No 3 The legend is in Dēvanāgiri and runs as follows —

श्रीमद विक्रम काकतीय प्रतापरुद्र देव विजय वत्सर १२३

(Śrimad Vikrama Kākatiya Pratāpa-Rudra-Dēva Vijaya Vatsara 123 [74]

The following observations may be made from what has been discussed above —

(1) Kākatiyas struck coins in both Gold and Copper

The silver coins of the dynasty are yet to be discovered

(2) Dēvanāgari and Telugu scripts are used for legends

(3) The reverse of the gold coins is left blank, and the figures and legends are punched on obverse of the coins

(4) The couchant bull and the lion are the devices noticed on the gold and copper coins

(5) the name of the dynasty and the king are clearly represented either in full or in an abridged form

(6) The Dēvanāgari legends on the copper coins are full and lengthy[75]

(7) The most interesting feature of the copper coins of the Kākatiyas is the representation of Nāgari legends on both the sides without any figure devices[76]

Many scholars indiscriminately attributed nearly a dozen coins of gold and copper to the Kākatiyas A few coins of gold have been found at the village Hewli or Hooly in the Southern Konkan They all weigh 63 grains each and bear the device of a lion and fragmentary legends Mr James Bird who studied these coins stated that they have legends in Telugu characters On some coins it is '*Balya-Sri*' and on others '*Rudra*' is written within a dotted circle[77] He assigned the latter group of coins, numbering six, to Kākatiya Rudradēva The obvious objection to this is that there are neither Telugu nor Kannada legends on the coins attributed to Rudradēva The script looks like '*Grantha*', which was never used by the Kākatiyas The device of lion was not only used by the Kākatiyas but was also adopted by the Pallavas, Kadambas[78] and the Eastern Chālukyas of Vēngi[79] The Kākatiyas never extended their sway over Southern Konkan and it is not easy to explain how the coins of a King ruling in Warangal come to be found in the Southern Konkan Gold coins may often travel long distances

Sir Walter Elliot, in Plate III of his book, "*South Indian Coins*", refers to three coins, Nos 93, 94 and 95 under the heading, "Coins

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74 *The Hindu* Madras, Sunday Supplement dated 26th June 1959 These coins are from the private collection of Sri Mahadevan

75 Some scholars pointed out that the legend on the coin described by Sir Walter Elliot is "Unusually long' (CHD, P 806) This can be got over on the ground that the use of lengthy legends on the coins was a common feature in the Indian Numismatic History The Kalachuri coins of King Krishna-rāja have lengthy legends *viz* —

'*Parama-Māhēsvara mahādēvyōh pad ānudhyāta Sri Krishna rāja*' (*CII*, IV-I, Intro Cl XXXI) The best standing examples for this are the Gupta coins The legend on the Standard type coin of Samudragupta is as follows —

समरशतवितत विजयो जितरिपुरजितो दिवं जयति ।

The obverse legend on Kumāragupta's Horseman Type is, क्षितिपतिरजितो विजयी कुमारगुप्तो जयत्यजित

(A S Altekar *Catalogue of the Gupta Gold Coins in the Bayana Hoard*, pp 8 and 263)

76 The occurrence of legends on the either side of a coin may be an uncommon phenomena but it is not a rare one We know that a Kērala King issued a coin which has '*Śri Gandarāmi usasya*', and '*Sri Vira Keralasya*' on the obverse and reverse respectively (C J Brown *Indian Coins*, Pl III No 9) The coins of the Koch Kings are also come under this category Narānārāyana the earliest member of this dynasty issued coins bearing the legends, '*Śri Śriman Naranārāyana bhūpalāsya Śakā 1477*', and '*Śri Śiva Charana-Kamala-Madhu-Karasya*' on the obverse and reverse The same is the case with the coins of Prānanārāyana another member of this *family* (*Studies in Indology* III p 139, Pl VII No 6, *JNSI*, II, p 149 III, pp 93 ff)

77 *JBBRAS* II pp 63 ff, *JAHRS* VI, p 142, *CHD*, p 806, *Kākatiya samchika*, pp 227 ff

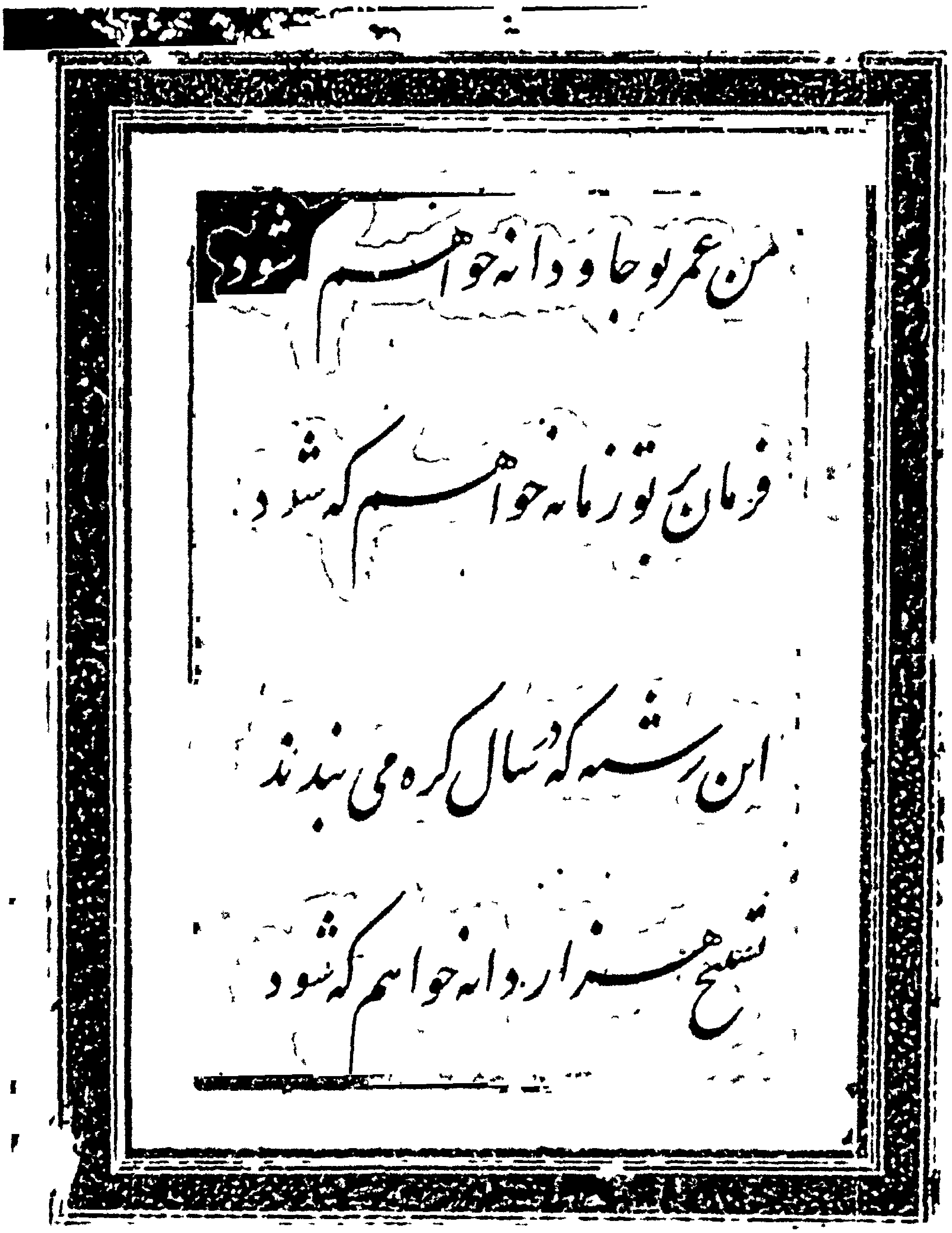
78 *JNSI*, XI, pp 88 ff, X, pp 143 ff

79 V A Smith *Catalogue of Coins in Indian Museum Calcutta* p 132, *Ind Ant* XXXII, pp 318-19, Pl Nos 11, 14-A and 15

PLATE G

Mudhoji Bhosley

PLATE II



Sal mubarak

Inscription on the reverse of Plate G

of the Kākatiyas of Warangal and Vema Reddis of Kondavid"[80] The description of the coins is as follows —

No 93

Gold Fanam	Obv —Couchant bull to right	
	Rev —Doubtful.	

No 94

Copper	Obv —Couchant bull to right and over its back a *lingam*
	Rev —Legend in Telugu.

No 95

Copper	Obv —Like the last
	Rev —Legend in Telugu

The attribution of these coins to the Kākatiyas by Elliot is not sound Sri S T Sreenivasa Gopalachari opined that the coin No 93 (from Elliot's collection, pl III) looks like a Chālukyan fanam, the reverse legend being "*Sri Ra*"[81] The coins No 94 and No 95 have very clear Telugu legends which can be read as "Śri Vira" Mr C J Brown observes "Somewhat latter, probably begin a series of copper coins both of Madhura and Tinnevelly, with the Telugu legend 'Śri Vira' on the reverse and a multitude of varying devices on the obverse, these include the gods of Hanuman and Ganesh, human figures, the elephant, bull, lion, a star, the sun and moon etc "[82] Hence it would appear that these coins were most probably the issues of the Nāyakas of Madura or Tinnevelly

In the Kavaiyadavalli hoard referred to above, three cup-shaped gold coins were found having fragmentary Telugu legends They are nearly of the same diameter, only varying from 78 to 82 of an inch, and are of the same weight, 55 grains each The metal is 16 carats fine[83]

[80] Cf, C J Brown *The Indian Coins* p 60, Rapson *Indian Coins*, p 38, *Br Numis Journ*, 1912, pp 314-15

[81] The legend on the reverse is not legible, but the letter '*Ja* is very clear Cf *JAHRS*, VI, p 143

[82] *The Indian Coins*, p 60

[83] *Ind Ant*, LVI, pp 190 ff

Regarding these Sri Srinivasa Raghava Ayyangar states

"They are round-shaped and are of the well known *Padmatanka* type They are cup-shaped and bear various punch marks on the surface, the most prominent of which is the symbol '*Śri*' in old Telugu-Kannada script on either side of the periphery at the ends of the horizontal diameter At the top of the vertical diameter is found a legend in Telugu script which reads as '*R* (*a*) *yasa*', and a portion of '*ma*' on No 1, '*Yasamu*' on coin No 2, and '*Samu*' on coin No 3 (Nos 5, 6 and 7 of the Plate) Putting these three together, we get a fairly intelligible and complete legend '(*Ra*) *yasamu*' At the bottom of the vertical diameter is found a symbol which may be taken to represent a crown Besides, there are a few indistinct impressions in the interspaces which perhaps are intended to represent lions The reverse is blank"[84]

The letter '*Śri*' is written twice on coin No 6, and not found on the remaining coins, i e, Nos 5 and 7[85] The legends, '*Rayasa*' and '*Sama*' are very clear on Nos 5 and 6, and the coin No 7 is in a very bad state of preservation, and hence it is not possible to read the legend on it There are no traces on all the three coins howsoever to suppose that there are the representation of lions The symbol which is at the bottom of the vertical diameter looks like a *śiva-linga* standing on a *yoni-pitha* It is very clear on the coin No 5 and it is conspicuous by its absence on the coin No 7

Sri Srinivasa Raghava Ayyangar assigned these coins to Ambadēva, who usurped the Kākatiya throne in the interval between the reigns of Rudrāmbā and Pratāpa-rudra-dēva Ambadēva bore the title, "Rāyasahasra-malla", and the legend 'Rāyasamu' noticed on the coins in question may be a contraction of the former It is further suggested that Ambadēva might have taken the Western Chālukyan coins as his model while issuing these coins or it may

[84] *Ibid*, pp 190-91

[85] It should be noted that the numbers 5, 6 and 7 refer to the original numbers given in the Plate

be that these legends were impressed a second time on the Western Chālukyan coins which existed before[86]

The attribution of these coins to Ambadēva may be a plausible suggestion, but at present it lacks confirmation The legend Rāyasamu which was a contraction of Rāyasahasramalla ('Raya' for 'Raya,' 'sa' for sahasra', and 'mu' for 'malla') is not satisfactory. We know that some of the feudatories of the Vijayanagar Kings assumed the title 'Rāyasamu' The Chōlasamudram inscription of Śaka 1439 mentions one Rāyasamu Kondamarusayya[87] Timmarasayya and Venkatappa Tirumalayya also bore the same title[88] In the later Kākatiya and the early Vijayanagara periods there was not much difference in paleography Feudatories were allowed to issue coinage of their own and this was not an uncommon feature in the Indian Numismatic History Further there are no traces to suppose that the legends on the coins under our survey are re-struck In the light of these facts there is every possibility to surmise that the coins in question were issued by the Vijayanagar viceroys

It would appear from what has been said so far that the Kākatiyas struck coins of their own The gold and copper coins of the dynasty are known, but the silver coins are yet to be brought to light The kings and their feudatories were allowed to enjoy coinage of their own The coins were issued in commemoration of particular events, titles, localities and bore personal names One interesting fact about the coinage of the period is that, the prevalence of different varieties of coins like mādas, gadyānas, rūkas and visas, lead us to suppose that there was no standardization in the currency system

86 *Ind Ant*, LVI, pp 191-92

87 *AR*, 87 of 1912

88 *Ind Ant*, LVI p 191

A 2313—19 B

The Yeoti Hoard of Bahamani Coins and Vijayanagara Pagodas

By

P. M. JOSHI

Yeoti is a village in Mukhed Taluka of the Nanded District in the Marathwada region. In May 1960 was discovered in this village the biggest hoard of Vijayanagar *Pagodas*[1] known to the present writer and a large number of Bahmani silver coins or *tankas*, 93 in all and 13½ gold coins, 10½ of which are Bahmani pieces and three Dinārs of Muhammad Tughluq (1325-1351) along with a few plain gold ornaments and a small brass pot. The half coin tells a story, because it is not a half coin numismatically but a full gold coin cut into half. The al-Hākim gold coin of Muhammad Tughluq also shows that an attempt to cut it into half was being made. One can only guess at the story behind this cutting. The coin was possibly cut into half when the hoard, so suddenly unearthed by its finders, was being shared between them. But this is merely a guess.

It is possible that the half Bahmani piece and the Tughluq coin, showing traces of being cut, indicate an earlier division of the hoard before it was deposited in its present find-spot. The Court proceedings in the case of this hoard do not conclusively indicate that the whole of the hoard was finally got hold of by the police. The real story is known only to the finders. They alone can say whether the missing half gold coin can still be traced or whether the hoard itself had only the half piece now available.

Along with this hoard were received a small brass pot and a few very plain gold ornaments. It is not clear from the Collector's report whether these items formed part of the hoard, nor was it possible to ascertain at what stage of the police investigations did these items come into their hands. Both the brass pot (far too small to contain more than 10 Bahmani coins or 20 *pagodas*) and the gold ornaments are evidently of a much later date, not more than hundred years old and they do not help to sustain the suggestion that they were converted into ornaments by melting some of the coins. The present writer is of the view that the brass pot and gold ornament formed quite a different cache and got mixed up with the coin hoard proper during the police investigations that took place as mentioned below.

Reports of Treasure Trove found in the State are expected to be sent to the Treasure Trove Officer to Government by local revenue authorities. The Treasure Trove Officer too has to keep his eyes open for reports of Treasure Trove coming to light. A report of this find appeared in a Marathi daily of Bombay on May 31, 1960. It was a small news item but rather exciting. It stated, "five labourers while digging the foundations of a dilapidated house in the village of Yeoti, taluka Mukhed, district Nanded had stumbled on a pot containing gold *ashrafis* and silver coins. The local police, having received information regarding this hoard, have confiscated from the families of the labourers gold and silver coins worth twenty thousand rupees." The report continued, "this hoard has now been handed over to the

1 For meaning and full discussion of the term *pagoda*, see Hobson-Jobson, 652-657

Collector of Nanded The five labourers concerned in this affair are absconding The Police are investigating the case "

The date line of this report indicated that it had been sent from Nanded on 30th May The Treasure Trove Officer acted promptly and on the very day on which the report appeared in the Marathi daily (31-5-60) a letter was sent by him to the Collector, Nanded, requesting for a detailed report on the hoard and requesting that the hoard itself be sent to Bombay for examination The Collector replied stating, " the matter is yet under investigation and it is likely that there will be Court proceedings " The Collector also suggested that the Treasure Trove Officer could depute his representative to see the hoard or in the alternative he offered to send two specimen coins by insured post for examination

Two specimen coins were received from the Collector in April 1962, one gold, one silver Both were Bahmani pieces, numismatically of great interest Shri M Ghaus, Superintendent, Department of Archaeology, Government of Maharashtra, who made the preliminary reading of the legends on the coins assigned them (rightly) to 'Alā-ud-Din Ahmad II, 1436-1458 This was indeed a great find, because Bahmani gold coins and also silver ones are not found often and in the history of Maharashtra numismatics this was the first hoard of Bahmani coins that was known We were now most anxious to get hold of the whole hoard The Court proceedings had by now been concluded, but various other formalities had to be undergone A copy of the Court proceedings was supplied to the Department of Archaeology by the Collector in February 1964 This merely whetted our apetite and we were most anxious to get the whole hoard in our hands for further study and for assessing its importance and significance It was not till September 1964 that the hoard was received in Bombay It was then discovered that the hoard contained a very large number of Vijayanagar *varahas*[2] or *pagodas*, 1018 in all bearing the trilineal legend प्रताप देवराय on the reverse and the figures of a god and goddess seated on the observe The figures being very small it was no easy task to make out the symbols, till finally Dr Moti Chandra of the Prince of Wales Museum came across a few specimens wherein one of the four hands of the male deity a *chakra* was clearly visible The gods were the deity Vishnu and his consort Lakshmi At Vijayanagar two Deva Rāyas ruled one after the other, Deva Rāya I from 1406-1422 and Deva Rāya II from 1422-1446 The coin symbols of Deva Rāya I were, among others, Lakshmi-Nārāyana and also Umā-Maheshvara whereas the deities used as coin symbols by Deva Rāya II are Umā-Maheshvara It is, therefore, reasonable to assign the whole of the *varaha* hoard to Deva Rāya I The pieces conform to the 32 rati standard and would vary in weight between 52 and 53 grains or thereabouts The average size is about 45" It has not been possible to weigh and measure any appreciable number of this large hoard A few of the pieces are half *pagodas* In due course further details about these coins will be studied One interesting fact about the quality of the Vajayanagar and Bahmani gold is that the Vijayanagar coins look undoubtedly made of inferior metal compared to the Bahmani gold A test of both golds revealed that the Bahmani gold was 100 per cent pure while the purity of the Vijayanagar gold was only 89 per cent The facts described by Firishta and mentioned in the following paragraph can, therefore, be explained by the operations of Gresham's Law—the better quality gold coins (the Bahmani mintages) being driven out by the baser money

The whole hoard taken together can be interpreted to support Firishta's account of the prevalence of Vijayanagar and Bahmani gold coins Writing about 1610 Firishta states that the *shroffs* of the Bahmani kingdom deliberately melted Bahmani gold coins to allow free and unrestricted currency to Vijayanagar *hūns*. They were chastised by Muhammad Shāh Bahmani I (1358—1375) and their activities were checked by the employment of *hkatris*

[2] For explanation of *Varaha* see, Bidie, *The Pagoda or Varaha Coins of Southern India*, Journal of the Asiatic Society of Bengal (JASB) 1883, 33-55

from Delhi for the minting of Bahmani coins But in the fifteenth century, continues Firishta, "in the middle of the reign of Sultan Mahmūd Shāh Bahmani (1482—1518) when the signs of disruption were seen at the foundation of the Empire of that family the Hindu *shroffs* of Deccan origin resumed their old tactics (of melting Bahmani coins) so that within six or seven years there was no trace of Muslim gold coins And they made current the gold coins of the kings of Vijayanagar and Telang known as *Hūn* and *Pratāpa* So much so that even today, 1016 A H (1607 A D) the same gold coins of the infidels are current[3]"

Evidently Firishta wrote merely from heresay and he did not see or handle any Bahmani gold pieces Possibly Bahmani gold coins had gone out of circulation when Firishta wrote, to come to light in our own times This inference finds support in the present hoard The last date of the gold and silver coins in it is 855 A H (1451 A D) and it was most probably buried about the close of the fifteenth century when there was much disorder and disturbance in the Bahmani kingdom which led to its final disruption and emergence of the succession states

Of the 13½ gold coins of the Yeoti hoard 3 are mintages of Muhmmad Tughluq (1325-1351), two of which are *Dinārs* of the Delhi mint of 726 A H (1326 A D), with the year in Arabic words, the *Azān* type mentioned by Whittell[4] The third piece is an al-Hākim coin A few of such coins are known[5] but the present coin is of a slightly different type not yet listed The Khalifa issues of Muhammad Tughluq have no mint or date stamped on them The other 10½ gold coins are all mintages of 'Alā-ud-Din Ahmad II Three of these have a slightly larger flan than the rest and they bear in the margin the date 855 A H (1451 AD) and give the mint *Muhammadabad* Only three gold coins[6] of 'Alā-ud-Din Ahmad II have been catalogued till now and the existence of not more than six is known Of the three catalogued only one has the legend that is seen on all the 10½ coins of the hoard *This is, therefore, undoubtedly a unique find* But even in the ten full coins can be seen two varieties, the three mentioned above and the rest Their weights vary between 167 45 grains and 171 30 grains In size they range from 1 84 cms to 2 28 cms

The silver coins included in the Yeoti hoard are all Bahmani pieces, no piece later than 855 A H (1451 A D) Of the 93 coins 80 are *tankas* of 'Alā-ud-Din Ahmad II, one of Bahman Shāh, the founder of the dynasty (1347-1358), one of Muhammad I (1358-1375), 2 of Muhammad II (1378-1397), 6 of Firūz Shāh (1397-1422) and 3 of Shihāb-ud-Din Ahmad (1422-1436) known to history as Ahmad Shāh Wali It will be seen that the coins make a representative collection of the silver issues of the Gulburga Bahmanis and the first two Bahmani Sultans of Bidar after the capital was shifted there from Gulbarga by Ahmad Shāh Wali in 1422 A detailed study of all the 93 silver coins is being made Readings of six silver pieces, one of each sultan represented in the silver portion of the hoard are given below Readings[7] of two gold coins of Muhammad Tughluq, one of Alā-ud-Din Ahmad II and one *pagoda* are given below A plate (vide Pl XXIII) of photographs (actual size) of the coins read accompanies this paper

3 Firishta I, 537-538 (Bombay Edition)

4 JASB, 1921 Cf *Catalogue of the coins of the Indian Museum, Calcutta*, II (IMC) 51 No 303, H Nelson Wright, *The Coinage and Metrology of the Sultans of Delhi* (CMSD), No 480

5 CMSD, Nos 492-492E, IMCII 53, Nos 318-320

6 JASB, 1876, 296, IMCII 201 No 18, *Numismatic Chronicle* 1881, 104

7 Shri Mohammad Ghaus, Superintendent, Department of Archaeology and Shri M K Hussain, Technical Assistant have given the writer considerable help in deciphering the legends on these coins and in many places improving on or correcting his readings Shri Singhal of the Provincial Museum, Lucknow, first read the al-Hākim coin

READINGS OF COINS IN PLATE XXIII

SILVER COINS

'Alāu'd-Dīn Bahman Shāh (1347-1358)

1

Obverse	Reverse
In circle —	In square —
(۱) السلطان الاعظم	(۱) سکندر الثانی
(۲) علا الدنیا و الدین	(۲) یمین الخلافة ناصر
(۳) ابو المظفر بهمن شاه	(۳) امیرالمومنین
(۴) [ال]سلطان	(۴) ۷۴۶
	Margin cut off

Muhammad Shāh I (1358-1375)

2

Obverse	Reverse
In circle —	In square —
(۱) سلطان	(۱) ابو المظفر
(۲) العهد و الزم[ا]ن	(۲) محمد شاه بن
(۳) حامی ملک رسو[ل]	(۳) بهمن شاه السلطان
(۴) ال[ر]حمن	

Margins —

Top	
Left	
Right	احسناباد
Bottom	۷۷[۴]

Muhammad Shāh II (1378-1397)

3

Obverse	Reverse
In circle —	In square —
(۱) الناصر لدین	(۱) الواثق بتائی[د]
(۲) الدیّان الحامی	(۲) الرحمن ابو المظف[ر]
(۳) لاه[ل] الایمان	(۳) محمد شاه السلطان

Margins —

Top	
Left	
Right	
Bottom	۷۹۴

Fīrūz Shāh (1397-1422)

Obverse	Reverse
4 In circle —	In square —
(۱) سلطان	(۱) تاح الدیا
(۲) العهد و الرمان	(۲) والدس فیروز
(۳) [ا]لواثق بتائیدالرحمن	(۳) ساه السلطان
(۴) ا[بو] المطفر	

Margins —

Top	
Left	
Right	احسںا[با]د
Bottom	[ع]

Shahābu'd-Dīn Ahmed Shāh (1422-1436)

Obverse	Reverse
5 In circle —	Between two thick lines —
(۱) السّلطان	(۱) .
(۲) العادل الںادل النّاصر	(۲) شهاب الدیا والدّین
(۳) . الدیان ابو المعارے	(۳) احمد شاه السّلطان
	(۴) ۸۲۷

'Ālāu'd-Dīn Ahmed Shāh (1436-1458)

Obverse	Reverse.
6 In circle —	In square —
(۱) السلطان	(۱) ابو المطفر علا
(۲) الحلیم الکریم	(۲) الدیا و الدین احمد
(۳) [ا]لروف علی عباداللہ	(۳) ساه ںں احمد ساه
(۴) العنی المهیمن	(۴) الولی الںهمی

Margins —

Top	..
Left	صرب ؟
Right	[مح]مد اباد
Bottom	[۹] ۸۴

GOLD COINS

Muhammad bin Tughluq (1325-1351)

1

Obverse In circle	Reverse In double lined circle
(۱) اشهد ان لا	(۱) الواثق بتائید
(۲) الـه الّا الله	(۲) الرحمن محمّد
(۳) واشهد ان محمدًا	(۳) شاه السلطان
(۴) عبده ورسولـه	

Margin (circular)

ضرب هذا الدينار بحضرة دهلي

سنه ست و عشرين و سبعمائه

2 Struck in the name of the 'Abbāsī Khalīfa al-Hākim II

(۱) فی زمان[ن] الامام	(۱) الله ابو
(۲) المومنین	(۲) [ا] العباس احمد
(۳) [ا]میر	(۳) [حا] م ملک[ـه]
(۴) ال[حا]کم	

3 Deva Rāya I of Vijayanagar (1406-1422)

Portraits of	(१) श्रीप्र
Lakshmī Nārāyana	(२) ताप दे
	(३) वराय

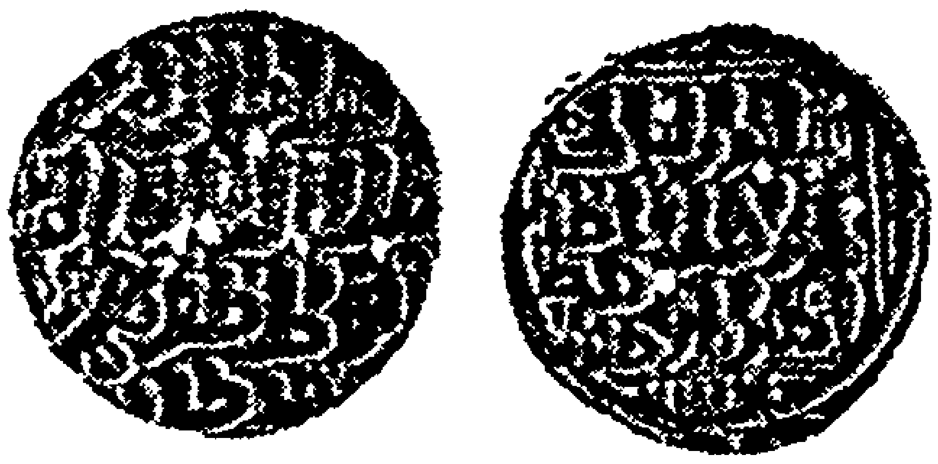
4 'Alāu'd-Dīn Ahmad II Bahmanī (1435-1458)

Obverse In circle	Reverse In square
(۱) السّلطان	(۱) ابو المظفر علا
(۲) المقوی للاسلام	(۲) الدنیا والدین
(۳) جامع الفضل والعد[ل]	(۳) احمد شاه بن احمد
(۴) و[الا]حسان	(۴) شاه السلطان

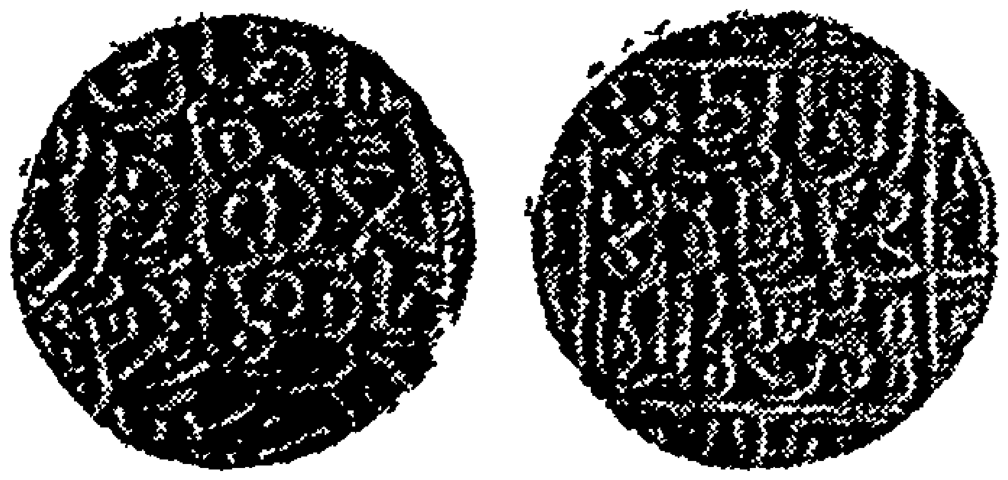
Margin

Top	(۱) حضر[ت]
Left	(۲) ضرب
Right	(۳) [ع]مدآبا[د]
Bottom	ع ع [۸]

Silver coins of the kings of Bahamani Dynasty

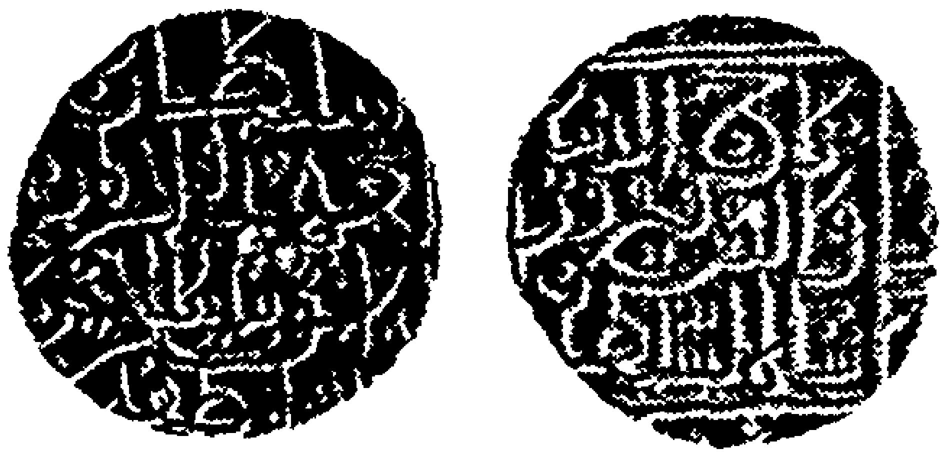


1



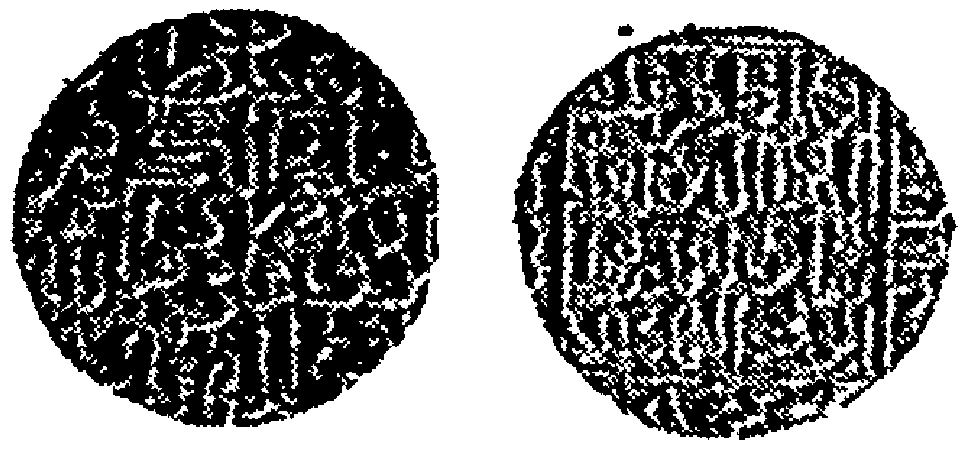
2

3



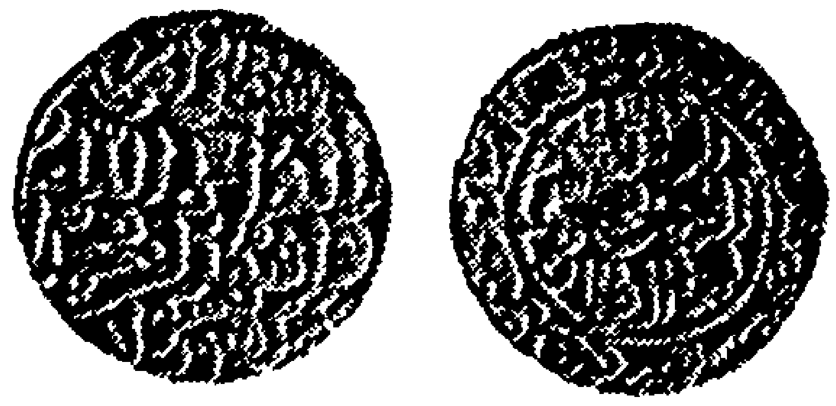
4

5



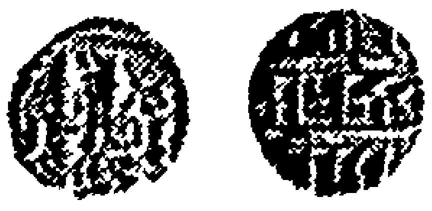
6

GOLD COINS

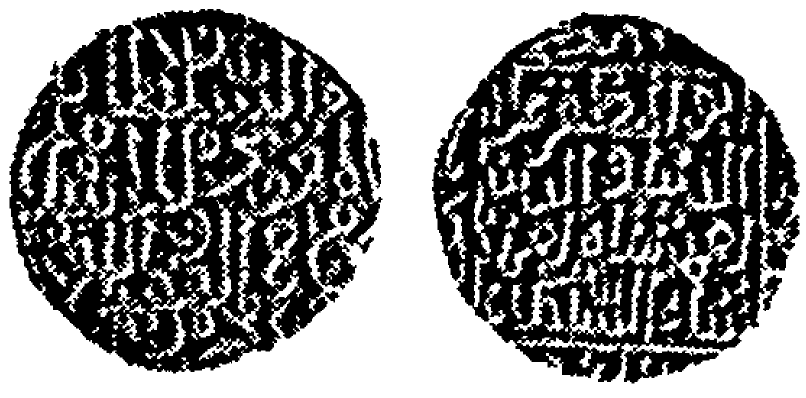


1

2



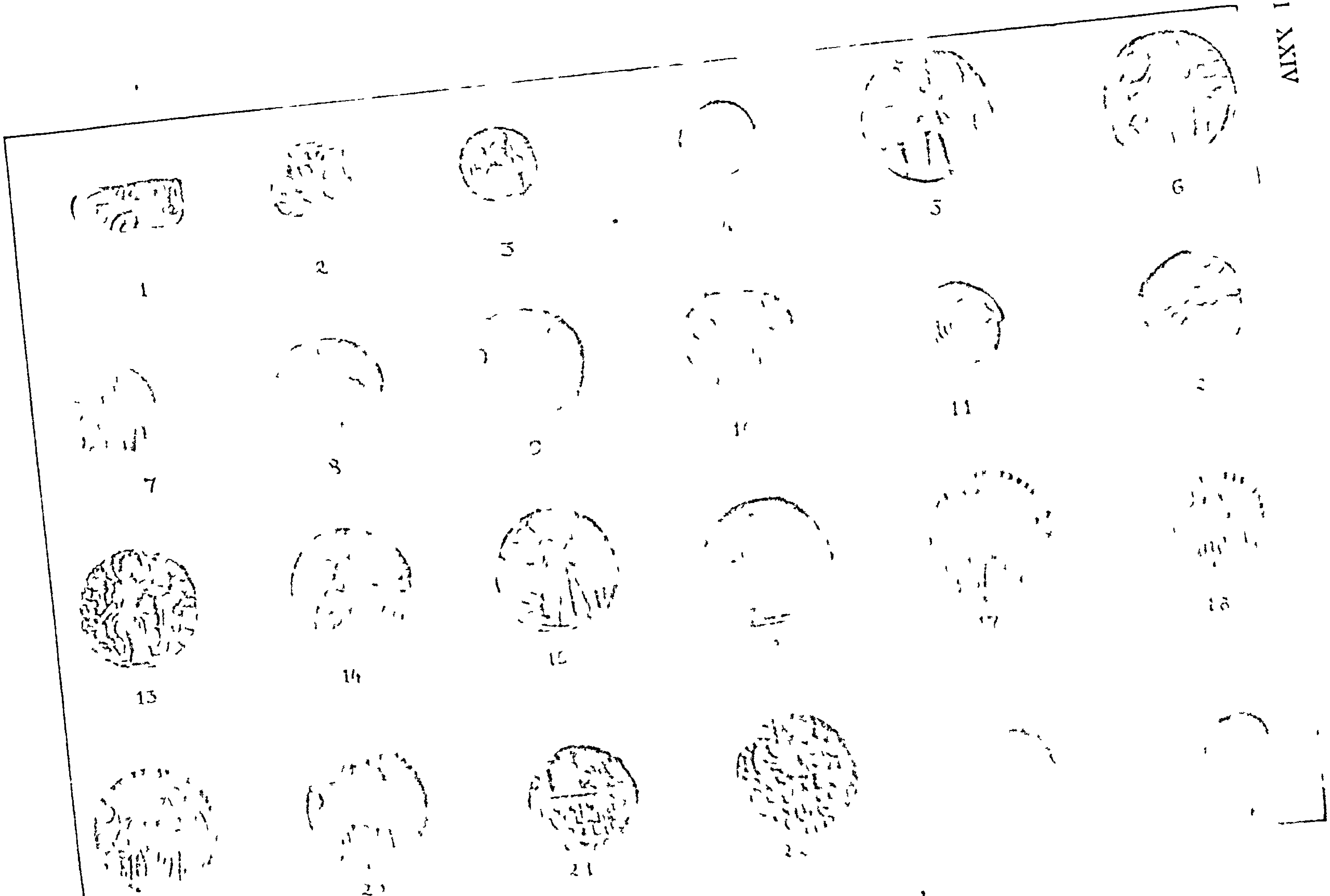
3



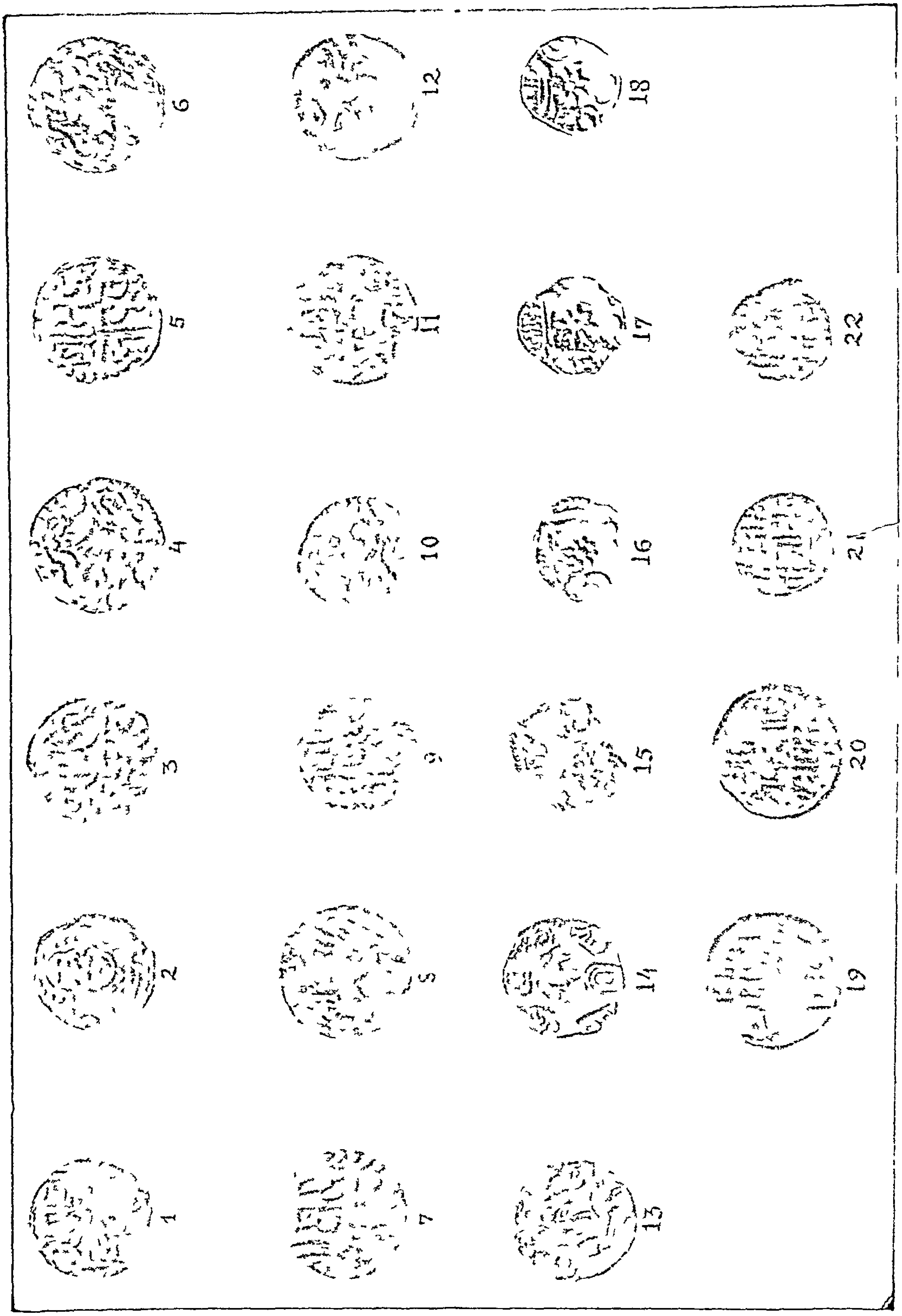
4

33 Gold and Silver Coins from Yeoti hoard

PLATE XXIV

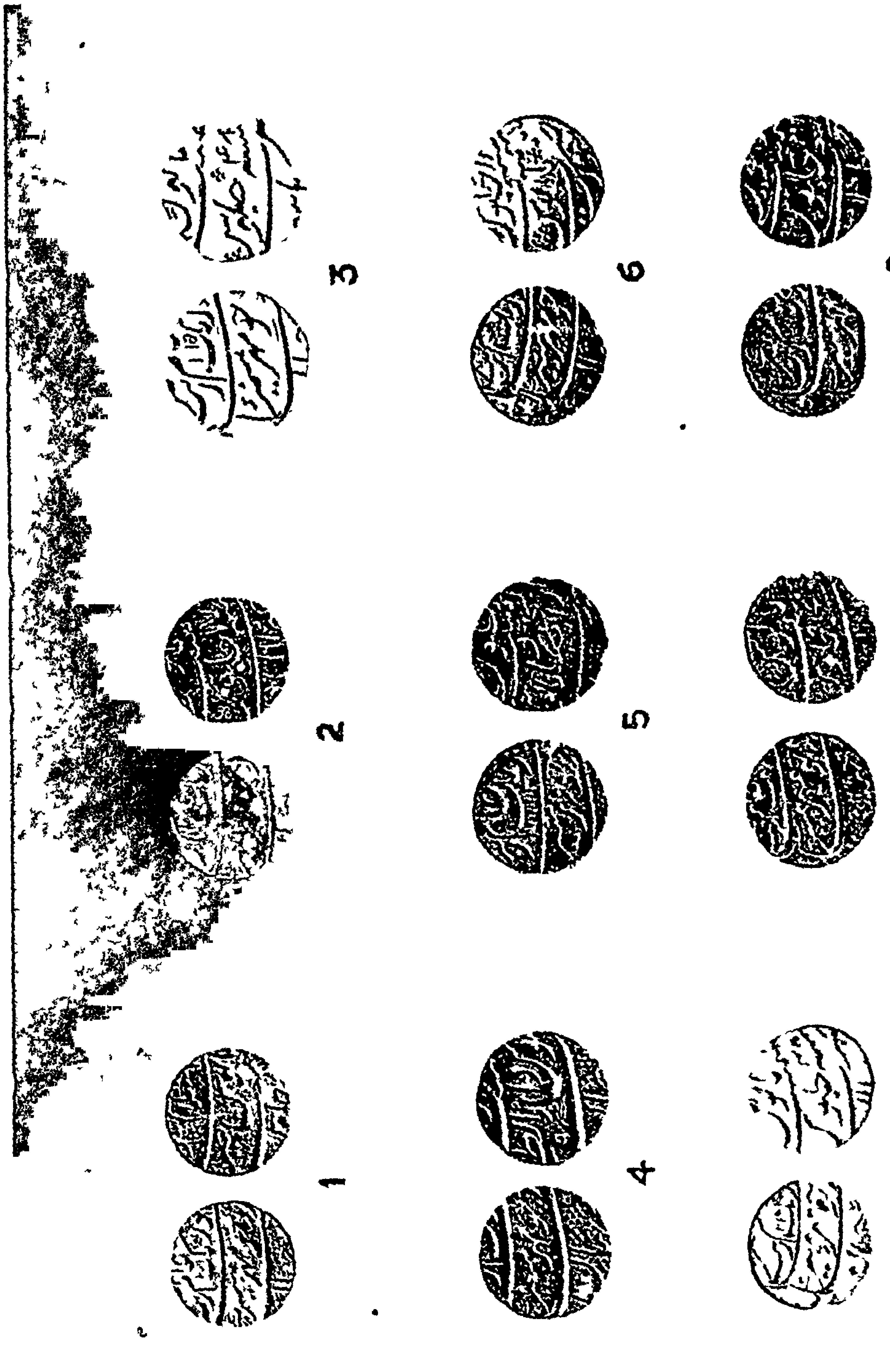


34 Coins of Early and Medieval period
Nagpur Museum

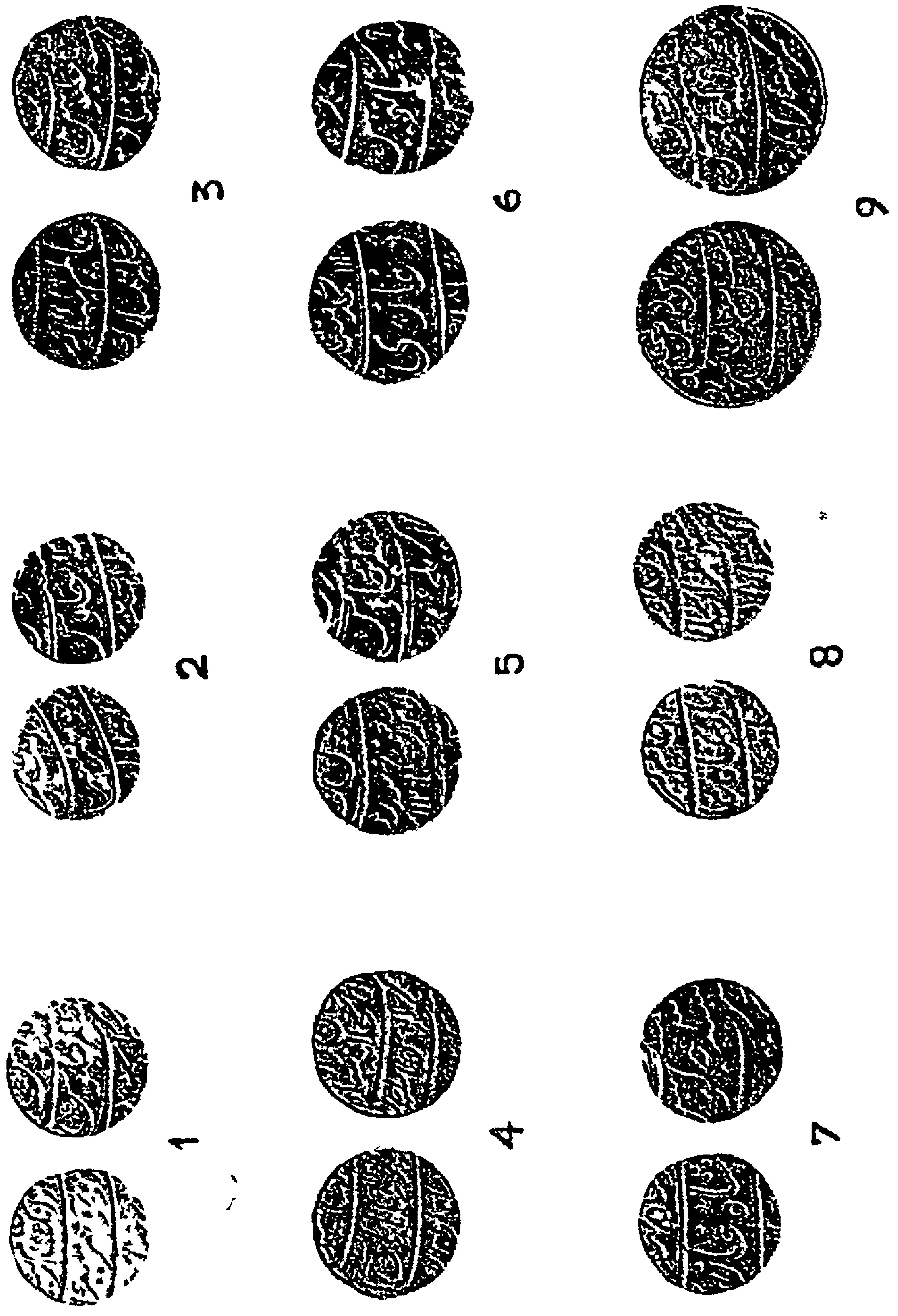


35 Mediaeval Hindu Coins,
Nagpur Museum

PLATE XXVIII



38 Gold Coins of Aurangzeb, Nagpur Museum



39 Gold Coins of the Mughal Emperors Aurangzeb—Shah Alam II, Nagpur Museum

Coin Collection in the Central Museum, Nagpur

By

V P Rode

The Central Museum, Nagpur, was established in the year 1863 It seems to have started collecting coins early as the first recorded date of receipt of some silver and copper coins from Major Pearse, R A, is the year 1867 The Museum was regularly receiving Treasure-trove coins For many years there was no numismatist on its staff The first catalogue of coins in the Museum was prepared by Mr G B Bleazby which was published in 1908 It was in 1912 when Mr Natesan Aiyer was taken on the staff of the Museum that the catalogues of Ancient, Mediaeval, Muslim, Modern and Foreign coins were prepared on scientific lines Mr M A Suboor, a keen student of Muslim numismatics, prepared two catalogues of the coins of the Sultans of Delhi and their contemporaries and those of the Mughals and their contemporaries but they were not published

Since there was no trained numismatist in the Museum the work of examining Treasure-trove coin found in the then Central Provinces and Berar was done by the Asiatic Society of Bengal It was in 1919 that Mr Suboor was appointed as Coin Expert and the work of examining the treasure-trove coins was taken up by the Museum In the beginning the reports on Treasure-trove coins and coins acquired for the Museum were published every year but from 1922-23 Triennial reports were introduced Since the work of examination and distribution of Treasure-trove coins was done by the Museum and as it was the principal museum in the State it could get the major share from those coins for its coin-cabinet enabling it to enrich its coin collection

As the number of cases of Muslim coins, especially the Mughal coins, has been more than those of ancient and mediaeval coins the collection of Muslim coins, in the Museum is much bigger than that of ancient and mediaeval coins The collection of ancient and mediaeval coins is still fairly representative and contains the coins of almost all the well-known dynasties

The earliest coins represented in the Museum collection are the punch-marked coins with four symbols from a hoard of silver coins found in 1893 near Dhapewara, a village in the Balaghat District, M P, which may be dated earlier than 600 B C This type of silver punch-marked coins seems to have had an exclusive circulation in this Mahākosala area and had also influenced the coinage of the Andhra country[1] (Plate XXIV, No 1) Other punch-marked coins with five symbols, which are known as kārshāpanas, have been found in old M P They are interesting and are deposited in the coin cabinet of this museum The coins from Thatari in the Bilaspur district, M P, included also minute coins known as Māshakas In this hoard of 253 silver punch-marked coins were 85 minute coins A similar hoard in which two types of punch-marked coins were found was discovered in 1924 at Taxila[2] The

[1] *J N S I*, Vol XIX, p 107 ff [2] *Ibid*, pp 110—112, M A S I, No 59

Kārshāpanas from Mangrul in the Hinganghat tahsil of the Wardha district are interesting as they are exclusively of one variety The other places where this variety of coins is found are Kaundinyapura in Amravati district, Nevari in Umrer tahsil of Nagpur district and Kondapur [3] A kārshāpana from the Bhandara hoard deserves special mention as it bears an owl symbol which has so far not been found on any other punch-marked coin[4] (Plate XXIV, No 2) The Museum possesses *some local coins which* include copper coins from Eran and also a copper coin from Pauni in the Bhandara district The coin from Pauni is attributed to king Dimabhāga[5] There is quite a good collection of the Sātāvahana coins in the Museum as it contains coins from the hoards from Brahmapuri tahsil, district Chanda and Tarhala in the Akola district The coins of the earlier hoard were found in 1888 They represented the issues *of the three Sātāvahana rulers* Shri Sātākarni, Shri Pulumāvi and Shri Yajna Sātakarni who were identified by Dr Hornle with Sātakarni Gautāmiputra I, Paulumavi Vasstheputra and Yajna Sātakarni Gautamiputra II There were coins with imperfect legends for which he did not offer any suggestion The later hoard from Tarhala discovered 1939 contained, about 1,600 coins It is interesting to note that the hoard contained coins of 11 kings, the three of whom are not known from any other source, numismatic or inscriptional The three kings known only from the coins of this hoard are Kumbha Sātakarni, Karna Sātakarni and Saka Sātakarni The coins of this hoard which have been published by M M V V Mirashi throw considerable light on the history of the Sātavhanas[6] (Plate XXIV, Nos 7—10) The Kushāna coins in the Museum include two gold coins, one quarter stater of Huvishka and a stater of Kanishka II or III which were discovered Harda in the Hoshangabad district of M P [7] (Plate XXIV, No 3—6) There is a representative collection of the Western Kshatrapa coins in the Museum A hoard of 670 silver coins of the Western Kshatrapa rulers was discovered in 1925 at the village Sonepur in the Chhindwara district, M P It contained coins of all kings from Rudrasena I to Swāmi Rudrasena III with the exception of Sanghadāman[8] (Plate XXIV, Nos 11 and 12) It may be incidentally mentioned here that a stone inscription of Kshatrapa Kumara has been recently found at Pauni and the same is *being published by* M M V V Mirashi

The Museum possesses 25 gold coins of the Guptas The kings represented in the collection are Samudragupta, Kacha, Chandragupta II and Skandagupta Samudragupta's coins are of the standard type Kacha's coin is also of the standard type For Chandragupta there are Archer type, Chhatra type, Lion-slayer type and Horseman type coins The Chhatra type coins are interesting as they show two varieties The coin of the second variety is a rare piece, which was found along with other two coins of archer type coins of Chandragupta II at Sakaur in the Damoh district in the year 1909[9] (Plate XXIV, Nos 13—16) A find of 58 repoussee coins bearing the legend Mahendrāditya in the Box-headed Characters has been discovered at Khairtal in the Raipur district The coins have been tentatively ascribed to Kumāragupta Mahendrāditya

There are some interesting gold coins of the contemporaries of the Guptas The coins from the former Bastar State which are all repousse pieces represent three Nala kings[10] Varāha, Bhavadatta and Arthapati, two of whom are known from inscriptions (Plate XXIV, No 10) The first ruler Varāha is known from his coins only The other repousse coins in the collection are those of Mahendrāditya and Prasannamātra These coins have legends in Box-headed Characters which was current in Chhattisgarh in the 4th-5th century A D The coins of Mahendrāditya were tentatively assigned

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3 *J N S I*, Vol XIX pp 112-114 XXVI, pp 91—95

4 *J N S I*, Vol X, p 75

5 *Ibid*, Vol VI, pp 9-10

6 *Ibid*, Vol II, pp 83—94

7 *Ibid* Vol XVII

8 N S XLVII, Article No 345

Shri Acharya subsequently corrected his reading of the date on Rudrasena III coins in the Prince of Wales Museum but could not publish it

9 *J N S* I, Vol XVII

10 *Ibid*, Vol, p 29 ff

A 2313—20 B

to Kumargupta I, Mahendrāditya[11] Recently coins of Kramāditya, which are of similar fabric have been found at Pitaiband in the Raipur district They are assigned to Skandagupta Kramāditya[12] The coins of both Mahendrāditya and Kramāditya are altogether different in style, fabric and weight from the coins of the Guptas In the latest issue of the Journal of the N S I on article appears on the identification of Mahendrāditya and Kramāditya of the repousse gold coins[13] but this identification has not been found satisfactory

The silver coins of Krishnarāja which are similar in fabric to the coins of the western Kshatrapas, Traikutakas and Skandagupta were first taken as those of Krishnaraja of the Rāshtrakuta family[14]

Krishnarāja of the coins has been correctly identified with the Kalachuri ruler Krishnarāja who can be assigned to the period 550—575 A D [15] The coins were in circulation for a considerable time and were known as Krishnarāja rupakas (Plate XXIV, Nos 23 and 24)

Of the coins of the later Kalachuri rulers of both Dāhala and Dakshina Kosala the Museum possesses a fairly representative collection There are both gold and copper coins of the Kalachuris in the Museum collection (Plate XXV, Nos 1—10)

The figures on the gold coins of the Kalachuris of Dakshina Kosala which could not be identified correctly for long have now been identified as Gajaśardūla The Museum possesses almost all the known types of their coins The biggest hoard[16] of the gold coins of the Kalachuris of Dakshina Kosala contained 2 coins of Gāngeyadeva and 4 coins of a ruler who has now been identified as Somesvara of the Nāga Dynasty of Chakrakota[17] (Plate XXV, Nos 11 and 12)

Of the South Indian coins in the Museum collection those of the western Chalukyas from Bhadrāvati (Plate XXV, Nos 13 and 14) and Jagaddeva Paramāra from Rohinkhed[18] are interesting (Plate XXV, 15) The Yadava kings represented by their coins in the Museum are Singhana, Mahādeva and Rāmchandra (Plate XXV, Nos 16 to 18)

Of the coins of the other South Indian dynasties those of the Śālankyayānas, Cholas, Pāndyas, the Vaijayanti and Vijayanagar rulers are also interesting

The Museum possesses copper coins of the Gonds of Deogarh who flourished in the 16th century (Plate XXV, Nos 19—22) The inventory of hoards and finds of coins and seals from Madhya Pradesh published in the XIX Volume of *J N S I* may be seen with advantage *for the study of ancient or mediaeval coins in* the Museum

Muslim Coins

There is a fairly rich collection of the coins of the Sultans of Delhi in the Museum It contains gold, silver, billon and copper coins of these Sultans (Plate XXVI, Nos 1—5) A gold coin of Nasiruddin Mahmod I was found at Raigarh[19], M P , along with the coins of the Yādavas There are eight gold and silver coins of Alauddin Khilji A hoard of 1,350 of his silver coins was found at Pauni which contained coins of all his known mints and dates Of the Tughluq kings coins of Ghiyas shah and Muhammad Shah and Firozshah are in gold and silver There are twelve gold coins of Muhammad III and 7 gold coins of Firozshah Tughluq in the Museum cabinet Of these seven coins of Firozshah there is one coin in which his name occurs with the name of Fath Khan The other coins of the Sultan of Delhi include those of the Lodhis and the Suris

The collection of coins of the contemporaries of the Sultan of Delhi in the cabinet of the Museum is equally rich There are coins of Sultans of Bengal, Malwa, Gujrat and Gulburga in the collection There are gold coins for the rulers of Malwa, Gujrat and Gulburga (Plate XXVI, Nos 6—10) Of the Malwa Sultans

[11] *Ibid*, Vol X, p 137 ff
[12] *Ibid*, Vol XXII, p 184 ff
[13] *Ibid*, Vol XXVI
[14] A S R IX
[15] *J N S I* Vol III, p 21 ff
[16] *Ibid*, Vols III and XIII (II), p 199 ff
[17] *Ibid*, Vol XVI
[18] P O C 1946
[19] *J N S I*, Vol VIII, p 147 ff

Ghiyasshah and Nasirshah are represented by the gold issues Of the Gujrat Sultans there is one gold coin of Mahund Bin Latif For the Bahmani rulers Ahmadshah II and Muhammad Bin Humayun there are 8 gold coins in the cabinet There are copper coins of all the Bahamani rulers in the Museum

Museum collection of the Mughal coins is the richest as more than half of the coins are of of these rulers There are several interesting and newly known mints of the Mughals in the collection There are gold coins of Mughal rulers in the cabinet which represent 29 mints [Plate XXVII, Nos 1—9, Plate XXVIII, Nos 1—9 and Plate XXIX, Nos 1—9] Of the 225 gold coins of the Mughals, 56 are of Akbar, 2 of Jahangir, 12 of Shahjahan, 102 of Aurangzeb, 9 of Shah Alam I, 2 of Jahandar, 9 of Farrukhsiyar, 18 of Muhammad Shah, 2 of Ahmad Shah, 7 of Alamgir II and 6 of Shah Alam II Of the 102 gold coins of Aurangzeb the one of the Lucknow mint is interesting as it is a new mint in gold of Aurangzeb Recently a find of 65 gold coins, all of Aurangzeb, was discovered at Bhortek in Malkapur taluk of the Buldana district Of these 51 coins were acquired for the Museum in which 9 mints were represented For Shah Alam I, Khujastebunyad is a unique mint Elichpur is a new mint for Farrukhsiyar There are many rare mints of Aurangzeb in silver His new mints in silver are Parenda, Kanji and Nasratgarh New mints in silver for Shah Alam Bahadur are Azamnagar and Parenda, for Farrukhsiyar, Bankapur, Sikakul and Shakola, for Rafiuddarjat Bankapur, for Shajahan II Bahadurgarh, for Muhammad Shah Kakurti and Sikakul, for Alamgir II Qandahar and for Shah Alam II Elichpur and Asafabad Ujhani

It will be observed that the coin collection of the Museum is not only rich in Mughal coins but it is equally rich in coins of the Sultans of Delhi and their contemporaries and those of the rulers of early and mediaeval dynasties that ruled over Central India and the Deccan The Museum has taken up the work of preparing three catalogues of coins and it is hoped that the first one comprising of early and mediaeval coins will come out soon

Description[20] of the coins included in the accompanying Plates XXIV—XXIX is given below —

PLATE XXIV

Obverse		*Reverse*
1 AR	**Punch-marked**	
The four symbols show Elephant with a small circle at the back, humped bull facing left, two bulls yoked in a plough and a solid oval surrounded by dots W 1 1 S 1 9×0 9 *Cf BMC P 10 Pt I 27*		Blank
2 AR	**Punch-marked**	
Five symbols are the Sun (?) Shadara-chakra, Crescent on hill, fish in the tank and the Ulūka (Owl) W 3 46 S 1 2 *JNSI X/75 Pl NB 1*		Blank
3 and 4 AV	**Huvishka**	
Half length figure of king to left wearing rounded helmet, holds scepter in right hand and an indistinct object in left hand legend OOHPKI W 2 04 S 1 2		Male deity to r legend 'Pharro' on left

20 Shri W H Siddiqui, of the Archaeological Survey gave me considerable help in deciphering the legends on Muslim Coins

PLATE XXIV—*cont.*

Obverse	*Reverse*

5 and 6 AV — **Kanishka II**

King at alter as usual wearing peaked helmet Trident with fillet, in L field Brahmi characters in lower field W 7 9 S 2 1	Standing Siva with bull, legend OHPO

7 Potin — **Sri Sātakarni III**

Elephant with trunk upraised standing to right, legend *sata-kamsa* W 1 8 S 1 7	Ujjaini symbol

8 Potin — **Sri Pulumāvi**

Elephant with trunk upraised standing to right, legend *.ri puļumavi* W 2 18 S 1 8	Ujjaini symbol

9 Potin — **Sri Yaña Sātakarni**

Elephant with trunk upraised, standing to right, legend *yanāsataka* W 3 2 S 1 85	Ujjaini symbol

10 Potin — **Śivasri Pulumāvi**

Elephant with trunk upraised, standing to right, *vasiri Pulumovisa* W 3 70 S 1 9	Ujjaini symbol

11 and 12 AR — **Swāmi Rudrasena III son of Rudradama II**

Kings head r traces of date behind kings head Date (27X) W 1 99 S 1 4	Three arched Chaitya with Sun and Moon above, curved line below, along the edge legend in Brahmi *Rajna mahakshetrapasa Swami Rudradama-putrasa Rajna Mahakshatrapasa Swami Rudrasenasa*

13 and 14 AV — **Chandragupta II (AD 380—414), Archer type**

King standing left holding a bow in left hand and arrow in the right Garuda standing on left *Chandra* under left arm W 7 59 S 195	Lakshmi seated on throne holding cornucopiae in left hand and filled in rt hand, her feet resting on lotus, border of dots on right *Śrī Vikramah*

15 and 16 AV — **Chandragupta II, Chhatra type**

King standing left, offering pearl neckace or purodashas on alter, behind him a dwarf attendant holds Chhatra over him legend W 7 58 S 2 00	Goddess Lakshmi standing left on pedestal, holding fillet in her right hand and lotus in left hand, on right *Vikramādityah*

Obverse		*Reverse*
17 AV Large size	**Varāha**	
Inside a circle of dots along the edge, a couchant humped bull facing left with the crescent in front, below the legend *Śrī Varāharājā* in a line in box-headed characters of the fifth century A D W 1 28 S 2 00		Blank.
18 AV Smaller size	**Varāha**	
Device as on the larger size coin, legend *Śrī Varāha* W 0 63 S 1 5		Blank
19 AV	**Arthapati**	
A couchant bull facing right, below the legend *Śrī Arthapatirājasya* in a line in the box-headed characters of the fifth century A D W 1 54 S 2 1		Blank
20 AV	**Bhavadatta**	
Device as on the above coin, below the legend *Śrī Bhavadattarājasya* in the box-head characters of fifth century A D W 1 74 S 2 05		Blank
21 AV	**Prasannamātra**	
In a circle of dots Garuda flanked by Śankha and Chakra, below the legend *Śrī Prasannamātra* in the characters of the fifth century A D W 1 24 S 1 7		Blank
22 AV	**Mahendrāditya**	
In a circle of dots Garuda flanked by Śankha and Chakra, above the Sun and the Moon, below the legend *Śrī Mohendrāditya* in the boxheaded characters of the fifth century A D W 1 28 S 2 00		Blank
23 and 24 AR	**Krishnarāja**	
Head of king to r		Inside the circle of dots along the edge the legend *Para [ma mahesvara mātāpi] tri pādānudhyata Śrī Krishnaraja* In the centre the figure of a couchant humped bull to r

PLATE XXV

	Obverse	*Reverse*

1 and 2 AV — **Gāngeyadeva (A D. 1015—40)**

Obverse: Inside a circle of dots, the three lines legend in Nāgarī characters —

Śrī madgā—
ngeyade—
va

W 4 05 S 1 9

Reverse: Inside the circle of dots the figure of four armed Lakshmi, nimbate, sitting cross legged with lotus in her upper two hands

3 and 4 AV — **Jājalladeva I (C.A.D 1090—1120)**

Obverse: Three line Nāgarī legend within a circle of dots —

Śrimajj [*a*]—
jallade—
va

W 3 87 S 2 00

Reverse: Figure of Gajaśārdūla inside the circle of dots

5 and 6 AV — **Ratnadeva II (A.D 1120—1135)**

Obverse: Inside the circle of dots two line legend

Śrī madra—
tna deva

W 3 88 S 2 00

Reverse: Figure of Gajaśārdula

7 and 8 AV — **Pruthvideva II (A D. 1135—1165)**

Obverse: Two line legend —

Śrī matpri
(*th*) *vedeva*

W 3 85 S 2 00

Reverse: Figure of Gajaśārdula

9 and 10 AE — **Pratāpamalla (A D. 1200—1225)**

Obverse: Three line Nāgarī legend —

Śrī matpra
tāpama—
lladeva

W 1 77 S 1 8

Reverse: Crude figure of Gajaśārdula ?

11 and 12 AV — **Somesvara**

Obverse: Within a dotted circle three line legend—

Śrī mad [*SO*]
me svara—
devas [*ya*]

W 4 10 S 1 9

Reverse: Within a circle of dots tiger roaring, standing to right, before him a dagger, above the animal the Sun and Moon

Obverse		*Reverse*
13 AV	**Jayasinha II (A.D. 1015—1043)**	
Nine punched areas, the central and the four corner areas show lion facing left, right and left side areas have the letter *Śrī* The top one has the legend *jaya* while the bottom one has the legend *deva* W 3 72 S 1 65 *IA Vol XXV Pl*		Blank
14 AV	?	
Seven punched areas, in the centre is the bull facing left the top and the bottom areas have the letter Śrī, the right hand areas show the legend *Dharmma* [ma] and *habha* and the left hand areas have *radha* and *vala* W 3 83 S 1 9		Blank
15 AV	**Jagaddeva Paramāra**	
Four punched areas, the one at the top has the Nāgarī legend *Śrī Jagadeva*, the two side areas show a symbol formed by curved lines and dots which appears to be a crude representation of the old Kannada letter Śrī The bottom area containing a symbol formed by a rectangular area over which rises a tower like thing representing probably a temple W 3 69 S 1 8		Blank
16 AV	**Singhana (A.D. 1210—1247)**	
Concave, cupshaped, eight petalled lotus in the centre and four punched areas on the sides The side areas show a partly preserved letter Śrī in the old Kannada-Telugu script the top area has a partly preserved legend *Singhana*, the punched area at the bottom has a conch W 3 76 S 1 7		Blank
17 AV	**Mahādeva (A.D. 1260—1271)**	
As above, the legend in the top area—.. *Maāhādeva* ? W 3 8 S 1 65		Blank
18 AV	**Rāmachandra (A D. 1271—1309)**	
As above, the legend in the top area—.. *Śrī Rāma* W 3 8 S 1 6		Blank

Obverse — Reverse

19 and 20 AE **Jātaba (Gond) (A.D. 1580—1620)**

Human figure between the second and the third line of the Nāgarı legend—

श्री राजा

जाटवाजी

W 14 235 S 2 25

Four line Nāgarı legend—

श्री रा
कोकपाहि
प्रति रा.

21 and 22 AE **Kokashāha (A.D. 1620—1640)**

Two line Nāgarı legend—
श्री माहा
जा जाटवा .

below human figure

W 5 220 S 1 7

Four line legend—
श्री..
.... .जा जाट....
को सुत
.

PLATE XXVI

Obverse — Reverse

1 AV **Nāsiru'd-Dın Mahmūd I (1246—1266 A.D.)**

In double circle

(۱) ى عهدالامام
(۲) المستعصم امير
(۳) الموسين

Margin

... عضرة دهلى .. ...

W 10 95 S 2 75

In double circle

(۱) السلطان الاعظم
(۲) ناصرالدنيا والدين
(۳) ابوالمظفر محمود
(۴) بن السلطان

Margin

. . . . .

2 AV **'Alāu'd-Din Muhammad Shāh II (1295—1315 A.D.)**

In circle

(۱) السلطان الاع[ظ]م
(۲) علاالدنيا والدين
(۳) ابوالمظفر محمد شاه
(۴) السلطان

No Margin

W 10 95 S 2·45

In central circle

(۱) سكندرالثانى
(۲) يمين الخلافة ناصر
(۳) اميرالمومنين

Margin

ضرب هذه السكة بحضرة دهلى

فى سنة اثنى و سبعمايه

A 2313—21-A

Obverse | Reverse

3-AV

Ghiyāthu'd-Dīn Tughluq (1320—1325 A.D)

In square

(۱) السلطان العازی
(۲) غیاث الدنیا والدین
(۳) ابو المظفر

In circle

(۱) تغلق شاه
(۲) السلطان ناصر
(۳) امیر المومنین

Margin

ضر[ب] هذه السکة بحضرة د[هلی؟]

W 10 94 S 2 8

4 AV

Muhammad bin Tughluq (1325—1351 A D)

In circle

(۱) اشهد ان لا
(۲) اله الا الله
(۳) واشهد ان محمدا
(۴) عبده و رسوله

In central circle

(۱) الواثق بتائید
(۲) الرحمن محمد
(۳) شاه السلطان

Margin

ضرب هذا الدینار بحضرة دهلی
سنة ست و عشرین و سبعمایه

W 12 51 S 2 3

[*Cf* H N. Wright, *Cat Coins Ind Mus*, Calcutta, Vol II (Oxford, 1907), p 51 (Unillustrated)]

5 AV

Firūz Shāh III Tughluq (1351—1388 A D)

In circle

(۱) الامام
(۲) فی زمن ابو
(۳) امیر المومنین
(۴) الفتح خلافته
(۵) خلدت

Correct order

فی زمن الامام امیر المومنین
ابو الفتح خلدت خلافته

Margin

In circle

(۱) [ا]لسلطان الاعظم
(۲) سیف امیر المومنین
(۳) [ا]بو المظفر فیروز شا[ه]
(۴) [س]لطانی خ[لد]ت

W. 11 02 S 1 9

	Obverse	*Reverse*

6 AV Mahmūd Shāh III of Gujarat (1536-1553 A D)

In circle	In double square :
(۱) الواثق المان	(۱) شاه السلطان
(۲) الو[تح]	۹۴۱
(۳) الدنيا والدين ابو	(۲) محمود بن لطيف شاه
(۴) ناصر	
Correct order	Correct order
الواثق المان ابوالتح ناصرالدنيا والدين -	محمود شاه السلطان بن لطيف شاه

W 10 97 S 2 15

7 AV Ghiyāth Shāh Khalji of Malwa (1468-1500 A.D)

In double square the outer one dotted.	In double square, the outer one dotted :
(۱) الواثق بالملك الو[تحی]	(۱) [ا]بو محمود شاه
(۲) ابوالفتح غياث شاه	(۲) الخلجى السلطان
star over 'الواثق'	(۳) [خ]لد ملکه ۸۸
	[A.H 885 to 880]

W 10 98 S. 2·05

[*Cf* Wright, *op cit*, p 250, pl XI, No 42, let of gold]

8 AV Nasir Shāh Khalji (1500-1510 A D)

(۱) الواثق بالصمد	(۱) بن غياث شاه الخلجى
(۲) لم يزلے	(۲) [ا]لسلطان خلد
(۳) [ا]بوالمظفر ناصر شاه	(۳) [م]لكه ۹۱۳

W. 10 87 S 1·7

[*Cf* Wright *op cit*, p. 253, pl XI, No 43]

9 AV Ahmad Shāh II Bahmani (1435-1457 A.D.)

In circle	In square
(۱) السلط[ان]	(۱) [ا]بوالمظفر
(۲) [ا]لمقوى للا[سلا]م	(۲) الدنيا والدين
(۳) جامع الفضل والع[دل]	(۳) احمد شاه بن احمد
(۴) و[ا]لا[حسا]ن	(۴) شاه السلطان
	Margin, bottom
	[ع] [ع] ۸

W. 11 07 S 1·95

[*Cf* Wright, *op. cit.*, p 201, pl VIII, No 18, which is of gold]

PLATE XXVI—*cont.*

Obverse | *Reverse*

10 AV **Muhammad bin Humāyūn (1463-1482 A D.)**

Obverse
In circle

(۱) بالله
(۲) المعتصم
(۳) [ا]بوالمظفر شمس
(۴) الدنيا والدين

Reverse
In square

(۱) محمد شاه بن
(۲) همايونشاه
(۳) السلطان خلد ملكه

Margin.

Left ضرب
Right [م]حمدا[با][د]
Top حضرت
Bottom ۸۶۸

W 10 96 S 1 95

[*Cf* Wright, *op cit* p 204, pl VIII, No 34, let. of gold]

PLATE XXVII

Obverse | *Reverse*

1 AV **Akbar (1556-1605 A.D)**

In triple square, the inner one of dots

(۱) لااله الاالله
(۲) رسول الله
(۳) محمد ۹۸۲]

Margins

Right [ا]بعلم[م] [ي]علي
Left
Top [ا]بعدل[ ] عمر[ر]
Bottom .

In triple oblong, the inner one of dots

(۱) بادشاه غازي
(۲) جلال الدين محمد اكبر

Margins

Top [خل]دالله ملكه
Bottom ...
[دار] ال[سلطنت] احمدآبا[د]

W 10 9 S 2 4

[*Cf* H N Wright, *Cat Coins Ind Mus*, Calcutta, Volume III (Oxford, 1908), p 11, pl II, No 79
Exactly similar with date, etc]

2 AV

In triple square, the inner one of dots

(۱) لااله الاالله
(۲) رسول الله
(۳) محمد ۹۸۳

Margins cut off

W 10 88 S 2 1

In triple oblong, the inner one of dots

(۱) بادشاه غازي
(۲) جلال الدين محمد اكبر

Margins Bottom

Bottom بقته دار العر[ب]

Cf IMC, III, pl II 99

Obverse | Reverse

3 AV

In multifoil pentagon

(۱) لا اله الا الله
(۲) محمد
(۳) رسول الله

Margins

Right:
Left:
[ع]لم[ا] ع[لى]

Top . ..
Bottom
ا[ررم] عثمان

Mint mark over محمد
W 10 81 S 2 55

In oblong

(۱) بادشاه
(۲) محمد اکبر ۹۲۷ غ[ازی]
(۳) جلال الدین

Margins
Top: السلطان خلد الله
Bottom .

(۱) تعا[لی] ملکه و سلطا[نه]
(۲) ضرب .. ....

4 AV

In diamond

(۱) لا اله الا الله
(۲) محمد
(۳) رسول الله

Mint mark on د in second line

W. 10 84 S 2 2

In oblong

۹۷۹
(۱) بادشاه
(۲) [م]حمد غ[ازی]
(۳) جلال الدین اکبر

Margins
Top: [خ]لد الله ت[عالی]
Bottom:
ضر[ب][دار] الخلا[فت] [اگره] ؟

5 AV

In diamond

(۱) لا اله الا الله
(۲) محمد
(۳) رسول الله

Same mint mark over د in second line
Margins cut off

W. 10 94 S 2 6

In oblong

(۱) [با]دشاه ۹۷۷
(۲) محمد غ[ا]ز[ی]
(۳) [ج]لال الدین اکبر

Margin top

(۱) ما[لکه]
(۲) [خ]لد الله تعا[لی]
(۳) [دار][ا]لخلا[فت] لاه[ور]؟

PLATE XXVII—*cont.*

6 AV

Jahāngīr (1605—1628 A D.)

Obverse

In double circle of dots against floral background

(۱) اکبر

(۲) شاه شاه

(۳) نگیر

(۴) نورالدس

W 10 85 S 2 2

Reverse

In double circles of dots against floral background

(۱) ب

(۲) صر آگره الہی

(۳) ماه اسفندارمر

(۴) سنہ

(۵) ۲۳ ۱

7 AV

Shāh Jahān (1628—1658 A.D)

Obverse

In diamond

(۱) لااله الا الله

(۲) محمد

(۳) رسول الله

Margins starting from right lower

بصدق ابی بکر و عدل عمر

با ررم عثمان و علم علی

W 10 94 S 2 25

Reverse

In diamond

(۱) بادشاه غازی

۱۰۶[۲]

(۲) شاهجهان

Margins starting from top left

شهاب الدین محمد صاحب قران ثانی ضرب

[د] ولا[ت]اباد

[*Cf* Whitehead, Cat Coin Punj Mus, Lahore, Vol II (Oxford, 1914), p 174, pl VIII, No 1216]

8 AV

Obverse

In square

(۱) لااله الاالله

(۲) محمد

(۳) رسول الله ۱۰۵۹

Margins

Right

Left

[و] ع[لم] ع[لی]

Top

Bottom

[با رز[م] عثمان

W 10 94 S 1 85

Reverse

In square

(۱) بادشاه غازی

۲۲

(۲) شاه جهان

Margins

Right

Left

ضر[ب] ملتا[ن]

Top

Bottom

قران ثانی

Obverse *Reverse*

9 AV **Aurangzeb (1658-1707 A.D.)**

Obverse: In circle	Reverse: In circle
(۱) عالم گیر	(۱) مانوس
(۲) [ا]ورنگ زیب ۱۱۱۵	(۲) میمنت
(۳) شاہ	(۳) سنہ ۴۷ جلوس
(۴) [ز]د چو مہر منیر	(۴) ضرب
(۵) سکہ	(۵) احسن آبا[د]
(۶) [د ر]جہان	

W 10 89 S 2 1

PLATE XXVIII

Obverse *Reverse*

1 AV **Aurangzeb (1658-1707 A.D.)**

Obverse: In circle	Reverse: In circle
(۱) عالم[گ]یر ۱۰۷۹	(۱) اسلام اباد
(۲) اورنگ زیب	(۲) ب
(۳) ش[اہ]	(۳) مانوس ضر
(۴) زد چو مہر منیر	(۴) میمنت
(۵) س[کہ]	(۵) سنہ جلوس
(۶) [در]جہا[ن]	

W 10 97 S 2 1

2 AV

Obverse: In circle	Reverse: In circle
(۱) عالم[گیر]	(۱) مانو[س]ن
(۲) [او]رنگ ز[یب] ۱۰۸۳	(۲) میمنت
(۳) ش[اہ]	(۳) سنہ ۱۷ جلوس
(۴) [ز]د چو مہر منیر	(۴) ب
(۵) س[کہ]	(۵) ضرالہ آباد
(۶) [در]جہا[ن]	

W 10 96 S 1 95

3 AV

Obverse: In circle	Reverse: In circle
(۱) [عالم][گیر]	(۱) مانو[س]ن
(۲) [او]رنگ زیب ۱۱۱۵	(۲) [می]منت
(۳) شاہ	(۳) سنہ ۴۸ جلوس
(۴) [ز]د چو مہر منیر	(۴) [ض]رب
(۵) سک[ہ]	(۵) [بر]ہانپو[ر]
(۶) [در][جہ]ا[ن]	

W 10 97 S 2 25

4 AV

Obverse	*Reverse*
In circle	In circle
(۱) [عا][لم][گیر] ۱۱[-]	(۱) [مانو][س]
(۲) [اور]ن[گ]ـر[یب]	(۲) میمنت
(۳) ش[اه]	(۳) [سـ] [جـ]لوس دارالظ[رب] ؟
(۴) [ر]د چو مهر منیر	(۴) ـب ۳۹
(۵) سـ[کہ]	(۵) ص[ر][الد][ر]
(۶) [د]رجهان	
W 10 9 S 2 15	

5 AV

Obverse	*Reverse*
In circle	In circle
(۱) عا[لم][گیر]	(۱) حلو[س]ں
(۲) [او]رنگ‌ریب	(۲) [میـ]منت
(۳) شـ[اه] ۱۱۱۳	(۳) [د]ارالجهاد مانوس
(۴) [ر]د چو مهر منیر	(۴) ضرب ۴۵
(۵) سـ[کہ]	(۵) حـ[یدر] [آباد]
(۶) [درجهان]	
W 10 97 S 2 05	

6 AV

Obverse	*Reverse*
In circle	In circle
(۱) ع[ا] [لم] [گیر]	(۱) سنہ ۱۱ جلوس
(۲) [او]رنگ‌ریب	(۲) میمنت
(۳) شاه	(۳) مانوس
(۴) [ر]د چو مهر منیر [۱]۰۷۹	(۴) ضرب
(۵) سکہ	(۵) سورت
(۶) [د]رجهان	
W 10 96 S 2 00	

7 AV

Obverse	*Reverse*
In circle	In circle
(۱) [عا][لم][گ]یر ۱۱۱۶	(۱) مانوس
(۲) [او]رنگ‌ریب	(۲) میمنت
(۳) شا[ه]	(۳) سنہ ۴۸ جلوس
(۴) [رد] چو مهر منیر	(۴) ضرب
(۵) سکہ	(۵) [سو][لاه]ور ؟
(۶) [در]جهان	
W. 1·94 S 2 00	

PLATE XXVIII—*cont*

Obverse

In circle

(١) عالم[گ]یر
(٢) [او]رنگ‌زیب
(٣) سـ[اه]
(٤) [ز]د چو مهر منیر
(٥) سکه
(٦) [در]جهان

W 10 94 S 2 05

Reverse

In circle

(١) مانوس
(٢) میمنت
(٣) سنه ١٧ جلوس
(٤) ضرب
(٥) کسا[یت]
[طفرآباد]

9 AV

Obverse

In double circle with dots between

(١) عالم گیر
١١٠٤
(٢) [او]رنگ‌زیب
(٣) شاه
(٤) [زد] چو مهر منیر
(٥) سـ[که]
(٦) [درجهان]

W 10 95 S. 2 05

Reverse

In circle

(١) مانو[س]ن
(٢) میمنت
(٣) سنه ٣٩ جلوس
(٤) ضرب
(٥) گا[لبر][گ][ه]

PLATE XXIX

Aurangzeb (1658-1707 A D)

1 AV

Obverse

In circle

(١) عا[ل]م[گیر]
(٢) اورنگ ١٠٨٦
(٣) سـ[اه]
(٤) زد چو مهر منیر
(٥) سکه
(٦) درجهان

W 10 96 S 2 00

Reverse

In circle

(١) مانوس
(٢) [م]یمنت
(٣) سنه ٢٢ جلوس
(٤) ضرب
(٥) گلکنده

2 AV

Obverse

In circle

(١) عالم[گیر]
(٢) اورنگ‌زیب
(٣) شـ[اه]
(٤) زد چو مهر منیر
(٥) سکه
١٠٨٢
(٦) درجهان

W 10 94 S 1 9

Reverse

In circle

(١) [مانو][س]ن
(٢) [م]یمنت
(٣) سنه ١٤ جلوس
(٤) ب
(٥) ض[ر] لکهنو

PLATE XXIX—*cont*

3 AV — Shāh ‘Ālam I Bahadur Shāh (1707-1712 A D.)

Obverse	*Reverse*
In circle	In circle
(١) [با]دشا[ه] ع[ا]ر]ے	(١) [مانو] [س]ں
١١١٩	(٢) [م]یمت
(٢) عالم بهادر	(٣) سم احد حلوس
(٣) شاه	(٤) صرب
(٤) سکه مبارک	(٥) حجستم بیاد
W 10 93 S 2 15	

4 AV — Jahandar (1124 A.D)

Obverse	*Reverse*
(١) [عا]زی [جها]ند[ار]	(١) جهان‌آباد
(٢) شا[ه]	(٢) دارالخلافة شاه
١١٢٤	(٣) صرب
(٣) [بر]مهرو ماه اول الفتح	(٤) مانوس
(٤) سکه	(٥) میمت
(٥) در آفاق رد	(٦) [جلو]س
W 10 87 S 2 15	

5 AV — Farrukh Siyar (1713-1719 A.D)

Obverse	*Reverse*
In circle	In circle
(١) فضل [حق]	(١) م[ا][ن]و[س]ں
(٢) ش[اه]	(٢) [م]یمت
(٣) و ذر فرح سیر رد	(٣) سم ٣ حلوس
(٤) س[که] ١١٢٦	(٤) صرب
(٥) سیم و	(٥) ایلچپور

Correct order

سکه رد از فضل حق برسیم و زر

بادشاه بحر و بر فرح سیر

W 11 00 S 2 15

6 AV — Muhammad Shāh (1719-1748 A D)

Obverse	*Reverse*
In circle	In circle
(١) [ ]١١٤ [مح]مد شا[ه]	(١) ا[ح]مد[آ]با[د]
(٢) ب[اه]	(٢) [ض]رب
(٣) باد غازی	(٣) سم ٩ مانوس
(٤) س[که]	(٤) [ج]لوس
(٥) [مبار]ک	
W 19 00 S 2 25	

A 2313—22 B

PLATE XXIX—*cont*

	Obverse	*Reverse*
7 AV	**Ahmed Shāh (1748-1764 A D)**	
°	In circle	In circle
	(۱) ا[حم]د شاه بہا[در]	(۱) [مانو]س
	(۲) ـــ	(۲) میـ[منت]
	(۳) [باد]شاه غاز م	(۳) سنہ ۳ جلوس[ں]
	(۴) [سکہ] [مبارک]	(۴) [ص]رب
	W 10 9 S 2 05	(۵) خجستہ بنیاد
8 AV	**'Ālamgīr II (1754-1759 A D.)**	
	In circle	In circle
	(۱) [ ] ۱۱۷ عالم گیر	(۱) جلوس م[ا]نو[س]
	(۲) ـــ	(۲) [میـ]منت
	(۳) بادشاه غ[از]	(۳) سنہ ۶ مستقرالخلا[فہ]
	(۴) کـــب	(۴) ضرب
	(۵) سکہ مبارک	(۵) اکبراباد
	W 10 9 S 2 00	
9 AV	**Shāh 'Ālam II (1759-1806 A D)**	

(Issued by the East India Company in the name of Shāh Ālam II)

	In dotted	In dotted rim
	(۱) الہ حامی دین محمد	(۱) مانوس
	(۲) سایہ	(۲) میمنت
	(۳) سایہ فضل شاہ عالم باد	(۳) سنہ ۱۹ جلوس
	(۴) سکہ	(۴) ضرب
	۱۲ ۲	(۵) مرشدآباد
	(۵) زد بر هفت کشور	
	W 12 18 S 2 65	Mint mark on سنہ

● ● ⊙

A Rashṭrakūṭa Coin (?)

By

N Lakshminarayan Rao

The Gold Coin (No 14, Pl XXV) described above has at the centre a standing bull facing left The syllable श्री is punched twice on the coin once at the top and once at the bottom of the bull The legend on the Coin, which is punched clockwise, starts immdediately after the syllable श्री at the top and ends just before that syllable Both the syllable श्री and the legend are in Kannada characters of about the tenth century A D The legend reads धर्म्म [म] ही भर धवळ Except for the third syllable म (the top of which has not come out on the coin) and the *repha* of र्म्म all the other letters are practically clear The reverse cf this coin is plain

Whose coin can this be ? First of all it has to be determined whether धवळ at the end of the legend is the proper name or a family name of the king who issued the coin We do not know of any king named धवळ who flourished in the tenth century and who could have used Kannada characters on his coins We know only two kings who bore the name धवल, both of whom ruled in Rajasthan The earlier of the two, who belonged to the Maurya lineage, flourished in the eighth century A D (A D 738)[1] The later Dhavala lived in A D 997 (Vikrama Samvat 1053) as recorded in an inscription of his found at Bijapur (near Mount Abu) in Rajasthan[2] Though this king ruled during the period, to which the legend on the coin has been assigned paleographically, it is not possible that his coins could have been in circulation in Vidarbha (at Bhadravati near Chanda), so far away from his dominions , nor could he have used Kannada characters

It is also difficult to take धवल as a family name Though we know of a king named नरेंद्र धवल[3] who is considered to belong to the family called धवल, his sphere of activity was in Northern Orissa, bordering on Bihar and as he was not a very prominent king his coins could not have been in use in Vidarbha And it is impossible that he should have used the Kannada script So the entire legend must be taken as the *biruda* of a king who issued the coin

We must therefore look for a king, of whose dominion Vidarbha was a part, who resigned in the tenth century and who would have used the Kannada characters The Imperial Rāshtrakūta kings of Malkhed, Govinda III (A D 792—814) and his son Amoghavarsha I (A D 814—880) had the *birudas* Tribhuvana dhavala[4] and Atiśaya dhavala[5] respectively Of course Vidarbha was under the Rāshtrakūta monarchs for not less than two centuries It is well known that the Rāshtrakūtas were of Kannada origin So there is every probability that the title (*biruda*) धर्म्म महीभर धवल on this coin was borne by one of the Imperial Rāshtrakūta monarchs, who ruled in the tenth century Among the kings of this family who flourished in the tenth century the most powerful was Krishna III, (A D 939—67), who ruled over an extensive empire and whose inscriptions are found from Jura near Maihar

[1] Bhandarkar s *List of Northern Inscriptions—No 18*
[2] *Epigraphia Indica*, Vol X, pp 20 ff
[3] *Epigraphic Indica*, Vol XXVIII, pp 44 ff
[4] *Ibid* , Vol XVIII, p 240
[5] *Ibid* , Vol VI, p 100

in M P to South Arcot district in Madras State In fact in one of his inscriptions he is described as *Chakravartin* In this connection it is worth noting that the title *Dharmma mahi-bhara-dhavala* resembles closely the biruda *Dharma-Mahārāja* born by kings of a number of southern royal families, namely, Pallava, Vākātaka, Kadamba and Western Ganga

One more point about assigning the coin remains to be examined , and that is the bull emblem appearing on the coin It may be contended that as the Rāshtrakūta emblem was the *Garuda*, it might be difficult to explain the appearance of the bull emblem But there is no such formidable difficulty since we know instances of ruling dynasties using some other symbols instead of their own *lānchhana* For example on some coins of the Eastern Chālukya king Vishamasiddhi (Kubja-Vishnuvardhana of the Seventh Century)[1] we find the symbol of the lion, while the Chālukya emblem is a boar Similarly, one of the later Chālukya kings of Kalyāna who bore the title *Trailokyamalla*[2] issued coins with the symbol of a lion though the Chālukya emblem is a boar Again the coins of the Vijayanagana kings[3] bear different emblems like Gandebherunda, Hanuman, Garuda and elephant, though their *lānchhana* was a boar So the presence of the bull on the coin under review need not be considered to be a serious obstacle in assigning it to the Rāshtrakūta dynasty of Malkhed

We may now examine the possibility of assigning the coin to any of the monarchs whose emblem was the bull The Eastern Gangas of Kalinga had the bull emblem but in the tenth century they did not use the variety of the Kannada or Telugu script

Nor could their coins be in circulation near about Chanda Another family which had the bull emblem and which used Kannada script was that of the Kalachuryas of Kalyāna but they rose to power only in the middle of the twelfth century

Thus, as stated above, in all likelihood the coin was issued by the Rāshtrakūta emperor Krishna III Future discoveries will have to confirm the attribution of the coin to this king

[1] *Indian Antiquary*, Vol XXV, p 322
[2] *Ibid*, p 321
[3] *Ibid*, pp 317-18

Paintings in Central Museum, Nagpur

By

Shri M V Athawale, Nagpur

Very recently I had an opportunity to observe the beautiful, though small, collection of paintings kept in the picture gallery of the Central Museum, Nagpur I was very much delighted to see the various art works and I thank the authorities of the museum, for giving me the chance for expressing my views on this gallery, which the only of its kind in the Vidarbha Region Picture Galleries play a vital role in education in general The time has come now, that we shall have to go to the Educationalists and make them realise the importance of art education in daily life A nation can have everything but without art one cannot live in the posterity Art is the everlasting perfume of civilization Order, harmony and sense of proportion can only be cultivated through the Fine arts It is not necessary that one should become an artist, but it is imperative that a cultured individual should *feel* for art and get a throbbing sensation near a masterpiece of architecture, painting or sculpture

In view of this it is necessary that in schools and colleges there should be gradual courses of study of æsthetics in Fine arts on the same lines as Mathematics or literature

The scheme will work very well provided the school boys and girls are allowed to visit art treasures or picture galleries, to gain first-hand knowledge The object of a visit to a Picture gallery will be to promote and cultivate an interest in Fine arts and also to understand and critically evaluate the different types of artwork

I do not hesitate to state that Shri V P Rode, Curator, has a great love for Art, and has extended all facilities to art lovers and students of Art, when they visit the picture gallery I believe this is the only museum in India where art students are given maximum facilities and assistance for observation and study of paintings The paintings are explained at length in the Museum by competent persons and it has thus helped many a newcomer to this field to appreciate the paintings for their own sake and for their technique, from all parts of the Vidarbha

Since the museum picture gallery is the only one of its kind in the Vidarbha Region, I feel it has a very important place in the field of Art Education If there is a co-ordination between other institutions and the museum, as I have stated, the aim will be achieved without much difficulty, as the authorities have great interest and zeal for co-operation

The Picture Gallery of the Nagpur Museum, represents two classes of Paintings —

(1) Modern Indian School,
(2) Old Miniatures

(1) *In the Modern Indian School*—There are—

(*a*) Portraits in Oil colours

(*b*) Portraits in Water colours

(*c*) Compositions in Oil colours (realistic Western school)

(*d*) Compositions in Water colours Old Indian decorative

(*e*) Composition in Water colours Modern Indian

(*f*) Landscapes in Water colours Western realistic

(*g*) Landscapes in Water colours Modern Western

(2) *Old miniatures*—There are miniatures representing Mughal, Rajasthani, Kangra, Bundi, and the Deccani schools with some examples from the Bhosla collection

The artists represented in the Modern Indian class, are mostly from the State of Maharashtra and a few from outside

In view of the space limitations I feel I will express my views on some of the paintings in general It does not mean that those paintings on which I have not commented are not important

Modern Indian School —

(a) and (b) Portraits in oil or water colours

(1) Shri Madhao Savalekar, famous artist of Bombay, has skilfully painted a portrait of his wife in oil in a vertical oblong shape with fine yellow *chatai* background with a simple white saree His style of painting is quite bold in effect especially in the blue outline which brings a very charming effect to the figure Every brush-stroke proclaims that the artist is in sympathy with nature The more so when you observe carefully the hands and the slightly tilted face The picture as whole is nicely composed, harmonious and delicate

(2) *M R Acharekar*—Shri Acharekar does not need any introduction His sketching in pencil and water colour work is well known to students and lovers of Art His lovely portrait of a Russian Artist which he did in Russia, while on his tour is a fine piece of his mastery over water colours He shows a great skill and speed in handling water colours Good draughtsmanship and fine sense of perspective and anatomy are the chief qualities which are evident in this portrait, which is fairly realistic [See Plate XXXI]

(3) *S L Haldankar* "Niranjani"— "Niranjani" is a most attractive and colourful painting done by Shri Haldankar, our great old master of Maharashtra, and it is one of his classics Shri Haldankar is a follower of realistic school and has a brilliant career as an Artist and teacher He has trained a number of students who are his faithful followers in realistic art He works both in oil and water colours but I believe he shows greater skill in landscape and portraits in water colour

Noteworthy features of his painting "Niranjani" are his perfect drawing of the figure and a sound study of light and shade The glow of the light falling on the face and the effect of the transmitted light and the radiance from the fingers is splendid The whole composition is very interesting and has become a centre of attraction in the gallery This picture has been reproduced in the Guide-book of the Museum [See colour Plate I]

(4) *Prof Langhammer* "Woman with Charkha"—This portrait has very striking effect as the artist has handled the subject with a very bold brush It shows his ability to bring out the three diamensional effect in a very skilful manner It is certainly one of his best efforts in oils, which medium he handles as easily and effortlessly as either water colour or pencil or charcoal

(c) Compositions (Realistic)

R B M V Dhurandhar "Santmela", this classic of the old realistic school is painted by our grand old master of Maharashtra He was formerly the Vice-Principal of the J J School of Art He depicts in this religious painting a gathering of "saints" of Maharashtra The painting has 100 per cent Maharashtrian character and culture Faithful drawing and a 'feel' towards reality are qualities best seen in this work He has a style of his own, which he developed and which gained much popularity in his time

(d) Composition (Old Indian decorative)

Vinayak Masoji Shri Masoji, *ex*-Vice-Principal of Shanti Niketan is conscious of the rich heritage of Tradition His painting is rich in line which is very powerful and expressive Though he does not use many colours one does not feel it, since the figure of Rani and the beautiful horse arrest our attention at a glance The treatment is decorative but the outline shows masterly understanding of anatomy and from Painting

is full of æsthetic favour and the colours used have Indian feeling not only in treatment and design, but also in its lyrical appeal

(e) Compositions (Modern Indian School)

Chavda Shivax Chawda by his own efforts and hard work has reached a prominent place in the galaxy of India's gifted artists He paints with vision and understanding His academy training provides him with a sound foundation and he loves to create new forms and techniques

Kathakali Dance is one of his favourite themes and he has produced a number of brush drawings one of which is represented in this gallery The drawing shows his perfect understanding of human form and command over his brush

K K Hebbar Hebbar is one of the favourites of Mr Gerrard, former Director of Sir J J School of Art, Bombay He has a capacity of assimilating new ideas and he experiments freely and boldly, till he finds his own self-expression He has evolved a technique of his own combining Eastern and Western methods

His painting 'Poornima' is a fine example of line-work and flat colour and still it has a rhythmic effect The composition is perfect and well-balanced, full of simplicity Yellow ochre, Indian Red and White used by him show strong Indian feeling

(f) Landscapes in water colour

Shri Dhond "Rains and umbrellas" this is a very fine example of landscape painting in transparent water colours Shri Dhond is a notable landscape painter, and takes much interest in painting clouds and marine views In this painting one can enjoy his proficiency in using wet colours without losing the outline Shri Dhond does not get baffled by the details and he records rapidly the fleeting impression of nature He has given stress on the atmosphere and effect of a rainy day and if the painting is looked at with half closed eyes, one would really feel how successfully the artist has the exact atmosphere express by a logical use of blue, grey and black colours

Shri Paulraj "Dhupchchaon" This painting presents a very fine study of trees The artist has selected a very fine group of trees and treating them as symbols of design he has very well concentrated on their constructional qualities The branches, some out-streched, some curving, combine into complicated patterns waving across each other almost like linking arms The overlapping of fine branches has created a continuity of form throughout [Plate XXXII 44]

The composition on the whole is well-balanced, and its freshness is well preserved The Darks have been very well treated and the artist has been very successful in achieving the effect of a strong feeling of sunlight

Old Miniatures

Kānhāki Shikāyat (Kangra, Kalam) Domestic scene This miniature in Kangra Kalam is painted about the end of 18th Century The picture illustrates a gopi complaining about Krishna, the hero of innumerable tales and legends and Yashoda is shown giving a patient hearing The most interesting part of the picture is, that the Artist has shown Krishna, estimating the result of the complaint, is about to quit the house His face shows guilty conscience The whole situation is very well composed and the colour scheme is brilliant and harmonious The chief features of Kangra Kalam, i e, delicacy of line and brilliancy of colour are quite evident in this picture Every detail is very minutely finished with utmost care

"*Hathi Pitambara*" (Rajasthani school) This is a striking example of Rajasthani school, one of the best in the collection The picture illustrates a battle scene At the centre of the scene is shown a vigorus Elephant dashing over a horseman, paying no attention to the counterattack by some soldiers with pointed spears and other weapons

The drawing of the Elephant is superb and full of expression As a direct decendant of Buddhist school it is only natural that

PLATE I

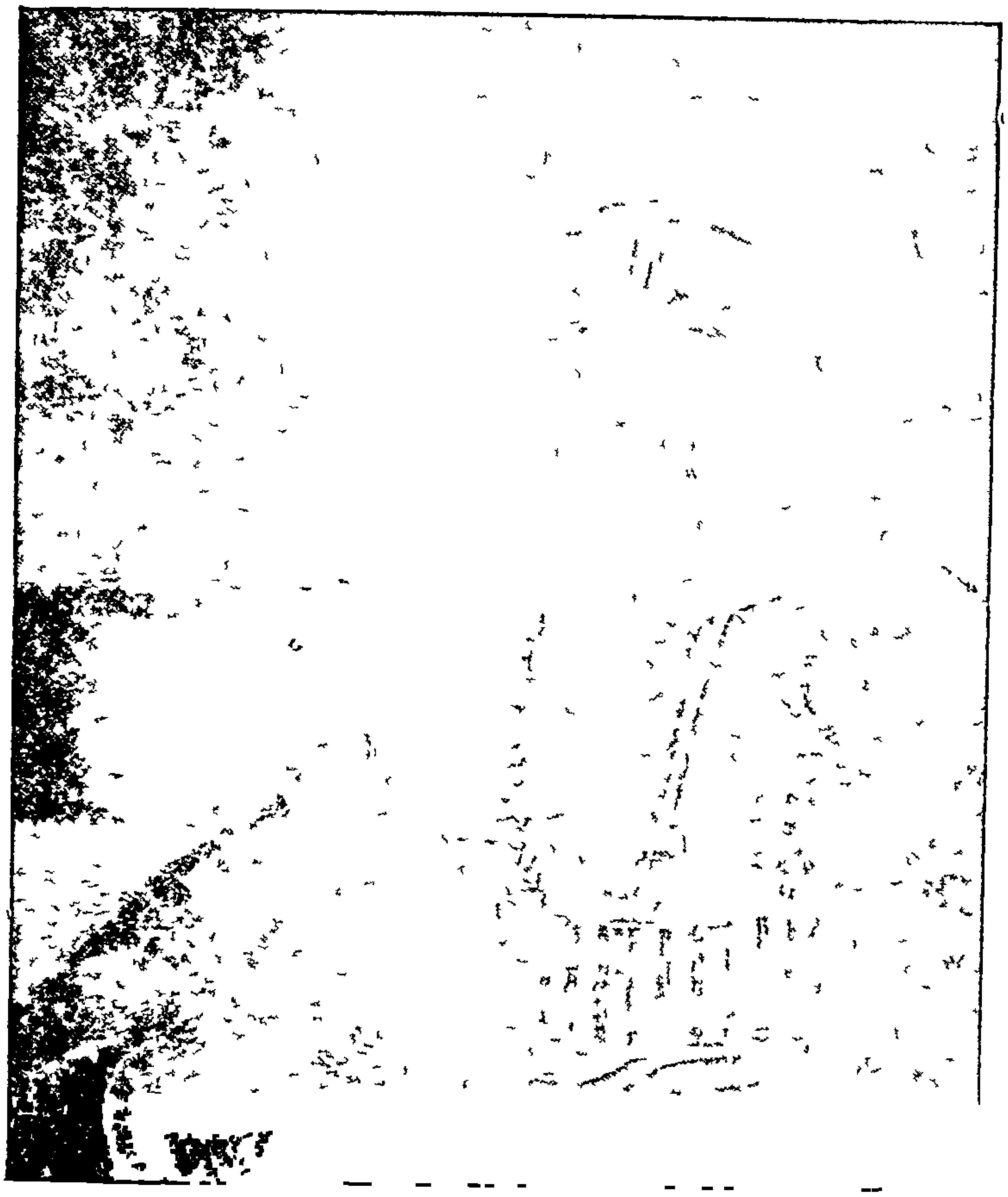
नीराजनी
कलाकार श्री हळदणकर

Niranjanee
By Shri Haldankar

कोळी स्त्रिया
कलाकार श्री गुर्जर

Fisher women
By Shri Gurjar

Two Notables from the Picture Gallery, Nagpur Museum



40 Mahadaji Scindhia, by an Italian Artist

41 Aḥmad Shah Niyazi, Ashti, Mughal Kalam

PLATE XXXI

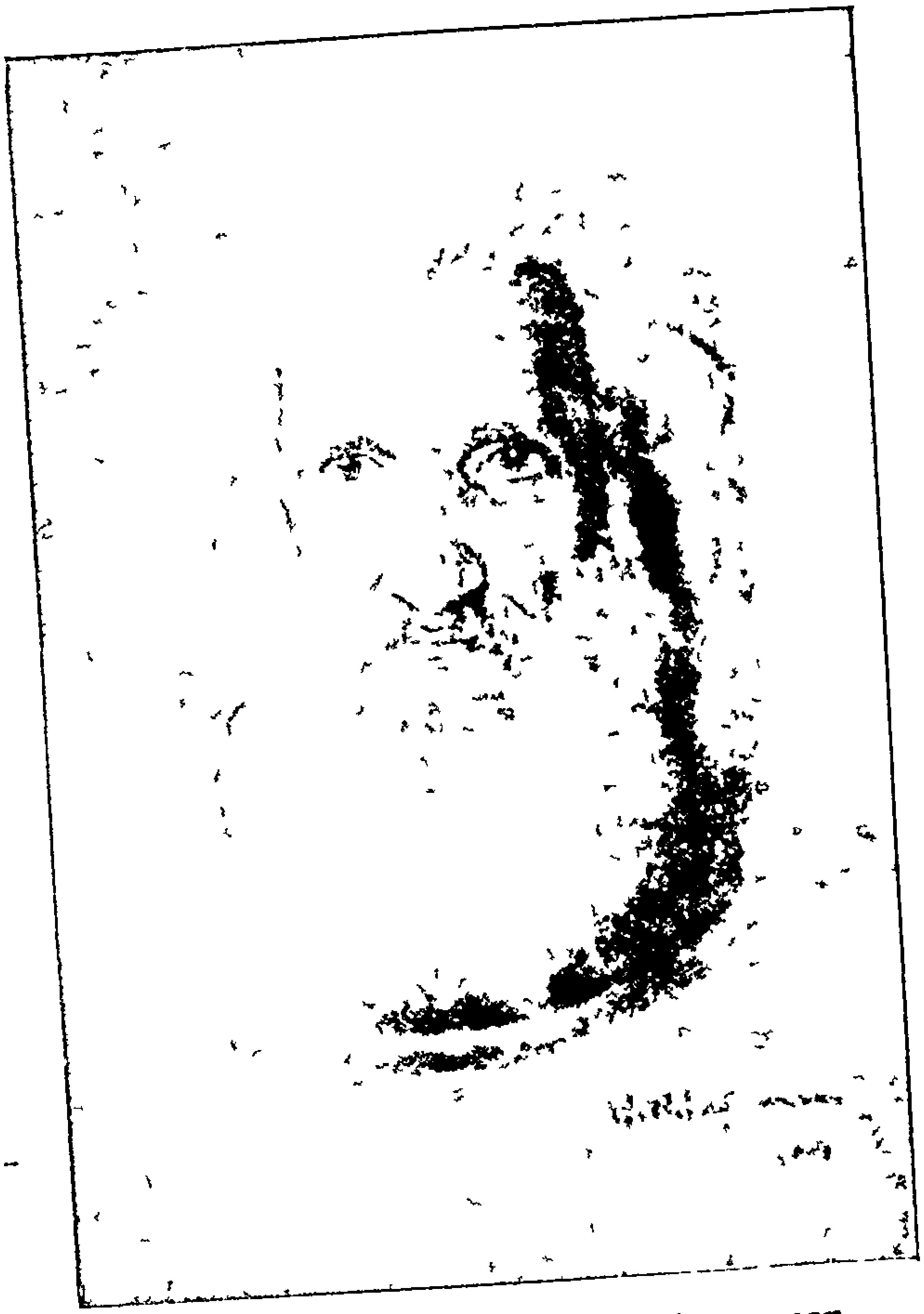
42 A Portrait,
by Shri M R Acharekar

43 Three Women,
by Shri Chawda

44 Light and Shade,
by Shri Paulraj

45 Dream, by Shri Almelkar

PLATE XXXIII



46 A Portrait, by Shri Wadanagenar

47 Jhelum, by Shri S M Joshi

Rajasthani school shows great skill and force in outline Vigorous outline is the basis of its language The whole grouping is very dramatical and full of movement

The green and reds are very contrasting, powerful and nicely placed and the lamp black colour of the Elephant is very dominant The white is very scarcely used for contrast and it gives a glow to the painting The gold colour is used profusely on the back of the Elephant adding royal dignity to it This picture is reproduced in colours in the guide-book of the Museum

A 2313—23 A

The Minerals of Maharashtra

By
Shri C N Chari,
Director, Geology and Mining Dept, Govt of Maharashtra

"Minerals are the wealth of the Nation" —Kautilya —The advent of the industrial age has greatly accelerated the demand for various minerals The rise of most of the industrial nations of the world has been to a large extent due to the increased utilisation of their mineral resources The need for a proper understanding of the known mineral resources of a region and the need for prospecting for new mineral deposits and systematic exploitation and utilisation of the minerals for setting up more and more mineral-based industries in the State can hardly be over-emphasised

2 The Maharashtra State ranks seventh amongst the various States in India so far as the value of minerals produced is concerned The total value of mineral production in Maharashtra State during the years 1962 and 1963 was Rs 6,38,24,000 (3 4 per cent of national production) and Rs 6,15,92,000 (2 9 per cent of all-India production) respectively While it is true that Maharashtra State has not been blessed with such extensive mineral deposits like those of Bihar, Orissa, and Madhya Pradesh, it has substantial deposits of important industrial minerals like Coal, Iron-ore, Manganese, Limestone, Dolomite and Bauxite It can be said that the pace of industrial development of Maharashtra State will depend on the extent to which its mineral resources are exploited and utilised for setting up mineral-based industries

3 The area covered by Maharashtra is about 3,10,000 sq kms However, more than 80 per cent of this area is covered by a capping of volcanic rock, known as " Deccan Trap " which has covered the potentially rich mineral-bearing older geological formations, from the older Archaean rocks to the Cretaceous rocks including the Coal-bearing Gondwana rocks These older rocks with their rich mineral deposits are exposed towards the eastern and southern region of the State, namely, in the Nagpur, Bhandara, Chanda and Yeotmal districts of Nagpur Division and in the Ratnagiri and Kolaba districts in Western Maharashtra Maharashtra State is richly endowed with resources of industrial minerals like Coal, Iron-ore, Manganese, Bauxite and Limestone It has substantial deposits of various types of industrial Clays, Chromite, Ilmenite and Dolomite and abounds in different types of building materials such as building stones, clays, sands, gravel, etc In addition, a number of useful minerals are known to occur in the State A short account of the mineral resources of Maharashtra is given below

COAL

Coal deposits in Maharashtra State occur in Nagpur, Chanda and Yeotmal districts of the Vidarbha region The important coalfields of the State are briefly described below

Kamptee Coalfield —The Kamptee Coalfield is located in Nagpur District, 4 workable seams with a thickness of 23 metres were proved in a 6 kms long belt It is estimated to contain total reserves of about 300 million tons including about 150 million tons of grade I coal The analysis indicates that the coal is of high moisture and non-coking type

Umrer Coalfield —This coal field is situated about 44 kms south-east of Nagpur and covers an area of about 4 sq kms The reserves in Umrer coalfield are estimated at 80 million tons, $\frac{3}{4}$ of which is of Grade I quality The National Coal Development Corporation has already started a colliery in this

field which is expected to produce 1 million tons of Coal annually by the end of 1965-66

Wardha Valley Coalfields —These coalfields include the Chanda, Ballarsha, Sasti, Warora, Majri and Bandar Coalfields in Chanda district and Ghugus-Telwasa and Wun or Rajur coalfields in Yeotmal district

Chanda and Ballarpur Coalfields —The reserves in Chanda area have been estimated at 136 million tons and in Ballarpur and Sasti area at 2,000 million tons by the Geological Survey of India The quality of coal is II grade and III grade There are 3 mines in Chanda area and one at Ballarpur, Sasti

The Warora Coalfield —Occupying a small area in the vicinity of Warora the reserves of this field are likely to be of the order of 60 million tons according to the Geological Survey of India The field is not being exploited at present and the area is being investigated by the Directorate

Majri Coalfield —A 17 ft thick Coal seam is being worked at the Majri Colliery and the reserves are estimated at 50 million tons of II grade quality by the Geological Survey of India

Bandar Coalfield —This field covers an area of about 35 sq kms and is estimated to contain reserves of the order of 108 million tons by the Geological Survey of India It is not under exploitation at present

Ghugus-Telwasa Field —This field lies partly in Yeotmal and partly in Chanda districts One colliery is in operation in this field

Rajur or Wun Field —This field lies in Yeotmal district and contains three seams 18′ to 31′ thick

In 1963 the production of coal in Maharashtra State from 10 working collieries was 947,639 tons valued at approximately Rs 227 43 lakhs

MANGANESE-ORE

The Nagpur and Bhandara districts of the State have some of the largest deposits of Manganese-ore in the country Occurrences of manganese-ore have also been noted in the Ratnagiri and Satara districts

Nagpur and Bhandara Districts —The manganese belt occurring in Nagpur and Bhandara districts is associated with the Gondite formations of the Sausar series of the Archaean system The estimated and probable reserves of Manganese-ore of average grade containing 30 per cent and more manganese in the important manganese belts in these districts are 8 million tons and 116 5 million tons respectively

In addition to the above, large deposits of low grade siliceous manganese-ore occur between the Pench and Kanhan rivers in Saoner and Ramtek talukas of Nagpur district which can be utilised after beneficiation

Ratnagiri District —The manganese deposits in Ratnagiri district occur in the Sawantwadi taluka adjoining Goa region The important deposits are located at Kalne, Phondiye, Bande, Adeli, Digne, Fakirpada, Galel The occurrences are, however, sporadic and the ore is of low grade

Manganese deposits in Satara district have been found in the laterite areas of Mahabaleshwar and Jeruli, they are also found in Kaskhanpur, Wai, Linghda and Sindbol localities But these are of little importance

The production and value of manganese-ore produced in Maharashtra State for the year 1963 was 151,000 tonnes and Rs 113 2 lakhs respectively At present most of the manganese-ore produced is exported but substantial quantities are also consumed in the two ferromanganese plants located at Kanhan in Nagpur district and Tumsar in Bhandara district There is only one manganese-ore beneficiation plant located at Dongri Buzrug in Bhandara district Some more plants are likely to come up in the near future The manganese-ore can be utilised for setting up plants to produce the electrolytic manganese metal and manganese dioxide

IRON-ORE

Important deposits of iron-ore associated with the old Bharwar rock formations occur in Chanda, Ratnagiri and Bhandara districts Some of these deposits are being exploited at present for export

Chanda District.—In Chanda district iron-ore has been known to occur at Lohara, Asola, Dewoolgaon, Pipalgaon, Fuser, Ratnapur and Bissi. Recently large deposits of iron-ore have been discovered at Surajgarh, Wadvi, Matvarsi, Damkod, Kucha hill and Naikal in the Sironcha tahsil. Occurrences of iron-ore have also been reported at Maseli-Jhendepar, Marhegaon, Vithalgaon and some other places.

The Lohara deposit located in Bramhapuri tahsil has proved reserves of 1.48 million tons. The Asola deposit has a reserve of 0.4 million tons of high grade iron ore. The estimated reserves of Piplagaon deposit are of the order of 0.29 million tons. The Fuser deposit in Gadchiroli tahsil has estimated reserves of 0.57 million tons of iron-ore with 60.81 per cent iron. Iron-ore occurrences at Bissi and Ratnapur are of minor importance.

The recent investigations carried out by the Department of Geology and Mining, Government of Maharashtra, Nagpur, in Sironcha tahsil led to the discovery of promising iron-ore deposits in the hill ranges at Surajgarh, Wadvi, Damkod, Matvarsi and Kucha hill.

Ratnagiri District.—In Ratnagiri district iron-ore occurs in the vicinity of Redi, Tak, Asoli, Ajgaon, Shiroda and Nanos in Vengurla taluka and Talone, Guldawe, Kinhala, Kaothani, Satarda, Sateli, Aros, Thakurwadi, Malewadi, Matond, Dhaboli, Tendoli and other places in Sawantwadi taluka.

Bhandara District.—The iron-ore deposits are located at Khursipar, about 10 miles east of Gondia. The reserves are estimated at 6.2 million tons.

Nagpur District.—In Nagpur district, iron-ore occurs two miles north of Bhiwapur.

In the year 1963, 416,277.97 tonnes of iron-ore valued at Rs. 83,25,554.00 was produced in the State. Most of the iron ore from the Redi area is being exported, but there are plans to set up a pig iron plant in Ratnagiri district based on the iron-ore deposits of the area.

BAUXITE

Bauxite, the main raw material for production of aluminium metal occurs extensively in Kolhapur, Kolaba and Ratnagiri districts and to a small extent in Thana district of the State. The deposits occur usually at the tops of plateaus and are derived from weathering of the highly aluminous basaltic rocks.

In Satara district bauxite occurs in the laterite near Mahabaleshwar. Occurrences of bauxite are also reported from west of Wai between Mahabaleshwar and Helwak.

The production and the value of bauxite deposits in the State during the year 1963 was 2,162 tons and Rs. 73,521 respectively.

LIMESTONE

The most important limestone deposits of the State are in Yeotmal and Chanda districts. In addition, the intertrappean type of limestone occurs in Nanded district. Limestone is found at several other places as in Ahmadnagar and Sangli districts. Limestone associated with the intertrappean Bagh beds is found in Dhulia district.

Yeotmal District.—The reserves of flux grade limestone in the Rajura area have been proved to be of the order of 32 million tons containing 45 per cent to 50 per cent lime, 1.5 to 5.4 per cent silica and 1.3 to 5.3 per cent Magnesia. An extensive bed of cement grade limestone is located near Sindola, Kurli, Chanakh and Paramodh villages where the reserves have been estimated to be of the order of 77 million tons out of which 35.7 million tons are proved.

In Kelapur taluka limestone occurs near Penganga river.

Chanda District.—Limestone deposits occur near Kondhala Purkepar, Kamargohan and Mardha.

Nagpur District.—Deposits of limestone associated with the Archaean rocks are found near Koradhi and near Kandri and other places in Ramtek, Saoner tahsils.

Nanded District.—Limestone deposits associated with the intertrappean beds occur near Mohada in Nanded district where the workable reserves are estimated at 0.7 million tons. The deposits are of poor quality.

Dhulia, Poona, Ahmadnagar and Sangli Districts—Large deposits of impure limestone estimated at over 7 million tons are located in Akkalkuwa taluka Limestone deposits associated with the trap rocks and formed probably as a result of weathering occur at Chas Nandur, Sangamner and other places in Ahmednagar district near Miraj in Sangli district and at several other places in Phaltan taluka of Poona district

In the year 1963, the production of limestone and the value of limestone produced in the State was 72,385 tonnes and Rs 28,95,412 respectively

DOLOMITE

Extensive deposits of calcitic, the dolomitic marbles and dolomite occur associated with rocks of the Sausar series of Archaean system in Ramtek tahsil of Nagpur district The biggest deposit is located near Dahoda The reserves of dolomitic marble deposits of Nagpur district have been estimated to be of the order of 183 million tons A small deposit of dolomitic limestone occurs near Korhadi in Nagpur district

Estensive deposits of dolomite and dolomitic limestone occur in Yeotmal and Chanda districts The reserves of flux grade dolomite near Rajur in Wani tahsil of Yeotmal district have been proved to be of the order of 50 million tons Similar dolomitic limestone occurs at many places in Wani taluka of Yeotmal district and at Nilajai Bori, Soit, etc, in the Warora tahsil of Chanda district The reserves of dolomitic limestone in the Yeotmal district would be enormous

The dolomite from Nagpur district and from Yeotmal district is being used to a small extent as flux in the Ferro-manganese plants located at Kanhan and Tumsar in the Nagpur and Bhandara districts, respectively Some of the deposits are used to manufacture lime

CHROMITE

The Chromite deposits occur in the districts of Bhandara and Ratnagiri In Ratnagiri district chromite occurs near Kankavli and Vagda where the deposits have been estimated at 55,600 tonnes and 15,700 tonnes respectively In Bhandara district the chromite deposits occur near Pauni village associated with ultrabasic rocks and the reserves have been estimated at 0 45 million tons

ILMENITE

Deposits of ilmenite sand occur sporadically along a 40 kms long coastal belt from Purnagadh to Malgund and beyond in Ratnagiri district The probable reserves of ilmenite sand are of the order of 240,000 tonnes The deposits are not being worked for the present

GLASS SAND

Promising deposits of glass sand occur associated with the Kaladgis and sand stones along the Sawantwadi-Vengurla road, in Ratnagiri-Sawantwadi coastal area and at Maldi, Valaval and Vetora The sands are being worked at some places for the manufacture of glass and for use as moulding and foundry sands

CLAYS

Important deposits of clays associated with the Gondwana rocks occur in Nagpur, Amravati and Chanda districts Deposits of Kaolin and other clays suitable for manufacture of sanitary-ware, tiles, etc, are found in Ratnagiri, Thana and Kolhapur districts at number of places

MICA

The deposits of mica occur at a number of places in the State—Ratnagiri, Chanda, Nagpur and Bhandara districts The most important occurrence is near Kudaval in Ratnagiri district where an extensive pegmatite vein occurs between Awalegaon and Panagad The mica found at surface is of impure quality but the quality improves at depth The deposit was being worked in the past, but is not under exploitation at present Mica-bearing Pegmatite occurs near Aheri in Chanda district and Korhadi and several other places in Nagpur district The deposits are however of little importance

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Development of Museums in Maharashtra

By
V. S. KAMAT

A museum has an important place in the education of a people It makes them familiar with processes of Social and Cultural evolution of the society in which they live and thereby develop a historic sense The beautiful objects of art exhibited in a museum also quicken the æsthetic urges of a people It is therefore recognised on all hands that a museum should be the centre round which should grow the cultural education of a people

The creation of Museums in the Bombay Presidency started with the establishment of Lord Reay Maharashtra Industrial Museum, Poona, some time in 1890 This museum was founded by the Industrial Association of Western India that resulted from the large-scale Inter-Provincial Industrial Exhibition of the year 1888 and is a memorial to His Excellency the late Lord Reay The Association dissolved in 1896 and all the funds and exhibits were handed over by that body to the Poona City Municipality The Museum and activities of the Association were defunct for nearly forty years Since 1930, however, the Poona City Municipality has revived and recognised the Institution The Board of seven Trustees consisted of four *ex officio* members of the Municipality and three elected donors to the Museum Fund

The object of the museum is to demonstrate Industrial processes and manufactured products It occupies the first floor of the Central Hall of the Reay Market in Poona City Under the Five-Year Plans, Government of India have sanctioned Building plot to the Museum and its new edifice has sprung up on its plot on Ghole Road, Poona-4 This Museum, proposed to be developed as a Multipurpose museum, will include section on Arts, Crafts, Archaeology, Numismatics, Weapons, Forest Products, Textiles, Paper Industry, Mineral Oils, Vegetable Oils Industries and the Sugar Industry in Maharashtra By the amendment of the Act it is proposed to establish this museum as a regional museum of Maharashtra

Museum of Bharat Itihas Sumshodhan Mandal, Poona

The Museum was opened in 1915 and is administered by a Managing Committee whose aims are to collect and conserve historical material relating to India and to publish the results of their researches The main hall of the institution is known as the Assembly Hall (63′×30′) which contains cases in which are exhibited pictures, manuscripts, arms and coins In the Eastern wing are exhibited collection of Indian paintings, textiles including dress of Nana Phadnis, Charts, Maps and Photographs The Institution has recently built an extensive, massive two-storeyed building which contains historical documents and manuscripts stored in Godrej cupboards The building was constructed with the help of the grants received from the Government of India and the Government of Maharashtra

The Prince of Wales Museum of Western India, Bombay

The Prince of Wales Museum, Bombay, owes its origin to the appointment by Government in 1904 of a Committee under the presidency of Mr G O W Dunn The Committee reported that the first efforts should be directed towards providing a proper place for the collections of work of J J School of Art and for the archaeological specimens collected by the Archaeological Survey of India, Western Circle and that with the museum of art and archaeology there should be a combined Museum for Science and Natural History.

It was urged that main object of the museum should be educational In 1905 it was decided that the permanent memorial of the visit of the Prince of Wales in that year should take the form of public museum and library The scope of the Museum was defined in 1920 as the art, archaeology, history, economic products and natural history of the Bombay Presidency in particular In 1920 the vast art and archaeological collections of the late Sir Ratan Tata were gifted by Lady Ratan Tata which still form the bulk of art section Sir Dorab Tata, a year later, gave a collection of pictures and antiquities and in 1933 a further large art collection of Sir Dorab Tata was received from the Trustees of Sir Dorab Tata Trust

In 1940 the Prince of Wales Museum was passed on to the Board of Trustees created under an Act by Government of Bombay The Museum receives grants from the Government of Maharashtra and the Government of India The Prince of Wales Museum, Bombay, is the principal museum of the State It is national in outlook and has acquired an international reputation by its gradual development under the able guidance of Dr Moti Chandra, its present Director Recently it has constructed a multipurpose Hall and a Nepali Art Gallery from the central assistance received by it under the Five-Year Plan Scheme.

In all there are sixteen Museums in Maharashtra which can be classified into five categories as under —

(A) *Museums managed by the Board of Trustees under the Act*, viz , (1) The Prince of Wales Museum of Western India, Bombay , (2) Lord Reay Maharashtra Industrial Museum, Poona

(B) *State Government Museums*—(1) Central Museum, Nagpur, (2) Shri Bhawani Museum, Aundh, (3) Kolhapur Museum, Kolhapur, (4) Raja Kelkar Museum, Poona, (5) Proposed Chatrapati Shivaji Maharaj Museum, Satara

(C) *Museums managed by the Municipal Authorities*—(1) Victoria and Albert Museum, Bombay, (2) Ahmadnagar Historical Museum, Ahmadnagar

(D) *Museums managed by the Research Institutions, Colleges, Libraries*—(1) Museum of the Bharat Itihas Sumshodhan Mandal, Poona-2, (2) Museum of the Deccan College of Post-Graduate Research Institute, Poona-6, (3) Museum managed by the Rajwade Samshodhan Mandal, Dhulia, (4) Museum of Sārwajanika Wāchanālaya, Nasik, (5) Willingdon College Museum, Sangli

(E) *Museums managed by private individuals*—(1) Parasnis Museum, Satara, (2) Akkalkot Museum, Akkalkot

In 1951, while inaugurating the Museum Education Conference in Poona, the then Chief Minister of Bombay said, "Our museums are becoming alive and will prove valuable allies and instruments in our efforts to develop the many-sided education of our people, for it is now universally admitted that the primary function of a museum is to educate and that its main contribution should be the enlightened inspiration of its visitors The preservation of exhibits is, therefore, a means to this much wider end To achieve this end it is not sufficient to educate our children We have to educate our adults, to provide them information and to inspire them with a vision of our problems of to-day, of our glorious achievements in the past and of the opportunities and possibilities before us in future For this purpose we must avail ourselves of every possible medium of education of effective instrument The Museum as we know to-day is made up of variety of contents , objects of art, historical and archaeological relics, skeletons of animals, machines, contemporary products, specimens of local geology or forest products, arts, crafts, natural history, anthropology, numismatics, etc Indeed there is no limit to the range of specimens in a multipurpose museum The main or primary function of a museum is to act as centre of instruction, education, recreation or enjoyment with a distinctly educative bias A museum should therefore be a living and dynamic repository of knowledge and cultural and an indispensable component of our social life, a centre which will help our citizen be they townsmen or villagers, be they literate or illiterate to understand, to appreciate their

history and culture, their folklore, tradition, their arts and crafts. The story of the region in which they live as seen in their geography, geology, forest and agricultural resources and economic products."

"Though our museums have not been developed as much as they should, some of them have made great effort to fulfill its objectives of expansion in spite of many odds."

When Government set up an advisory board known as the "State Board for Historical Records and Ancient Monuments" in December 1949, it was one of the functions of the Board to advise Government for development of museums in the State. In pursuance of a resolution passed at the first meeting of the State Board for Historical Records and Ancient Monuments it was resolved that as a first step, the Director of Archives and Shri R. G. Gyani should make a survey of museums in the State and submit the report to the Board before the end of the year. Accordingly a survey of Museums was undertaken by the Director along with Shri Gyani and a detailed report of the survey of Museums in Poona, Aundh and Kolhapur was submitted to Government.

In course of time the museum activity in the State grew rapidly after the merger of States of the Deccan in the State of Bombay. Museums at Kolhapur, Aundh were placed under the control of the Director of Archives and Historical Monuments. The Museum at Sangli was transferred to the Willingdon College, Sangli, and the same is supervised by the Principal of Willingdon College, Sangli. Museums in Karnataka and Gujarat were transferred to the States of Gujarat and Mysore respectively. On the reorganisation of State of Bombay on linguistic basis, the Central Museum, Nagpur, which was first under the control of the Industries Department of Central Provinces was placed under the Director of Education, Poona. Subsequently all Government Museums in the State were placed in charge of the Director of Archives and Historical Monuments for convenience of Government and all non-Government museums in the State of Maharashtra were asked to submit proposals for expansion schemes under the Five-Year Plan to Government through this directorate. Proposals for central assistance for development of museums in Maharashtra were also routed through the Directorate of Archives and Historical Monuments. The Director of Archives was co-opted member of the Standing Committee of the Central Advisory Board of Museums. He was also appointed member of the Central Advisory Board of Museums and he still continued to hold the position. As nominee of the Government of Maharashtra he put forward an effective plea for various expansion schemes of the Government and non-Government museums in the State of Maharashtra. Government Museums at Aundh and Kolhapur received central assistance for equipment. Two posts of Gallery Assistants were created in respective museums. Raja Kelkar Museum in Poona and the Lord Reay Industrial Museum, Poona, received building grants. Regular maintenance grants and grants-in-aid to non-Government Museums have been continued by Maharashtra Government every year. The Deccan College, Poona, the Bharat Itihas Sumshodhan Mandal, Poona, Ahmadnagar Museum and the Sangli Museum were given grants-in-aid for their development schemes. Government has also proposed to set up a museum known as Shri Chatrapati Shivaji Maharaja Museum of Maratha History, at Satara. Government have sanctioned a nucleus staff consisting of a Curator, a Gallery Assistant, two peons and two watchmen for looking after this museum. As soon as suitable building is made available in Satara for this Museum Government will take immediate steps to establish the same.

With a view to improve the condition of Museums in the State, Government appointed a small Advisory Committee for Museums on the analogy of the Central Advisory Board of Museums to advise Government in the matter of proper upkeep and use of museum exhibits and allied matters. Functions of this Committee are as under —

(1) To visit and inspect museums in the State of Maharashtra.

(2) To suggest ways and means for labelling and cataloguing or listing or preparing card index for exhibits

(3) To report on the methods of preservation adopted in the museums and to suggest ways and means to improve them whenever necessary

(4) To consider the photographs of all important exhibits in the Museums of the State

(5) To consider proper utilisation of museums' instruments of Education

(6) Generally to assess the needs of museums in the light of terms of reference given to the Committee and to make recommendations for adequate museum service in each institution

The Director of Archives and Historical Monuments worked as Chairman of this Committee from 1956 to 1959 The tenure of this Committee is for three years It was reconstituted in May 1960, when the Secretary of Education became *Ex officio* Chairman and the Director was appointed as member It was again reconstituted in August 1963 with the following members —

(1) Secretary, Education and Social Welfare Department, *Ex officio* Chairman

(2) Dr Moti Chandra, Bombay

(3) Dr H D Sankalia, Poona

(4) Prof Shankar Palashikar, Bombay

(5) Shri S Bathwala, Bombay

(6) Director of Archives and Historical Monuments, *Ex officio* Member

(7) Superintendent of Records, Bombay—*Secretary*

The Museums Committee has powers to co-opt two members

Reports of the survey of Museums done by the Museum Committee have been published in the annual reports of this Directorate (1957-58 and 1958-59) The Committee also prepared Draft Rules for distribution of antiquities discovered during excavation among several museums in Maharashtra State They were considered in detail at a meeting held in Poona on 6th June 1961 and subsequently at 1962. The Draft Rules approved by the Committee were sent to Government for further necessary action Shri V P Rode, Curator of Central Museum, Nagpur, Co-opted Member of the Committee, prepared a scheme for development of Kolhapur Museum at the instance of the Committee The Development Scheme prepared by him could not be implemented on account of national emergency declared by Government

Maharashtra is fortunate in having different types of museums The Prince of Wales Museum of Western India, Bombay, has acquired a place of its own in the galaxy of museums in India It is a premier institution of museology in Bombay and imparts training to the Curators of several museums in India It is recognised by the University of Bombay for post-graduate studies in museum methods and technique The Victoria and Albert Museum at Byculla gives interesting account of the development of Bombay It has also a fine collection of old maps of Bombay and old books on Bombay giving its earlier history

Coming to the museums in Poona the Lord Reay Maharashtra Industrial Museum, Poona, has developed many sections industry, agriculture, forest, art, crafts and archaeology It is developing in true perspective all the aspects of Maharashtra, its geographical, sociological, economic improvements

The Museum of the Bharata Itihasa Sanshodhaka Mandala, Poona, and the Deccan College Museum are mainly historical and archaeological museums They have made their name in India as the finest institutions for studying history and archaeology by research methods Both the institutions are recognised by the Poona University for post-graduate studies in history and archaeology

Raja Kelkar Museum, Poona, has been taken over by Government for management in September 1962

Main sections of this museum are (1) Paintings, (2) Wood-carvings, (3) Bronzes, (4) Stone sculptures, (5) Pottery, (6) Textiles, (7) Illustrated manuscripts, (8) Sword handles, (9) Brassware, (10) Foot cleaners (Vajri), (11) Religious spools, (12) Votive Mudras,

(13) Kalamdans, (14) Terracotta objects, (15) Excavated exhibits, (16) Brass toys, (17) Toilet exhibits, (18) Lamps A unique collection of 500 lamps of various types and designs used in India, (19) Tambool A unique collection of more than 300 Tambool exhibits, (20) Coins, copperplates seals, scent bottles and antique boxes

The paintings of various schools, *viz* , Rajput, Kangra, Deccan and Maratha Collection of Paithan paintings is unique Wood-carvings from Gujarat, Maharashtra and South India have been displayed There are innumerable varieties of Deccan and Jain bronzes The textiles of Maharashtra, Saurashtra, Bengal and Andhra are of peculiar quality and thin texture The collection of decorative brass-ware and vagues of Maharashtra, Gujarat and Andhra Pradesh is a unique collection

A wonderful feature of this museum is that a building owned by Baji Rao I, known as 'Mastani Mahal' was bought and removed physically from a place five miles away from Poona and again created as a Marathi period section of the Museum in the museum premises

From Poona one should visit Shri Bhawani Museum, Aundh, by rail up to Rahimatpur or Koregaon and take an S T Bus to Aundh The museum built by the late Rajasaheb of Aundh has commanding situation on a hill with a beautiful building specially meant for a museum, which is well-lighted and well-ventilated It has been maintained nicely by the Government of Maharashtra It has one of the finest picture galleries in Maharashtra It contains beautiful original paintings of different schools It has a small but good collection of sculptures Recently the Museum Assistant has set up a small section of pre-historic arefacts This Museum is visited by the Primary and Secondary School students of the districts around

From Aundh one should proceed to Sangli and Kolhapur Museums at both these places are the legacy of the State Rulers who collected things in their distant tours of places in India and abroad The Museum at Kolhapur is mainly an archaeological museum Its finest collection consists of Brahmpuri Bronzes discovered during excavations and these were exhibited in the Prince of Wales Museum, Bombay, for a period of two months A monograph on them is being prepared by Shri Karl Khandalvala, Chairman of the Board of Trustees of the Prince of Wales Museum, Bombay

The collection of sculptures from places around Kolhapur has been done by Shri S S Shinde, In-charge of Kolhapur Museum There is good collection of weapons acquired from the ex-Savantwadi Museum There are good paintings of local artists such as Babaurao Painter and others The Museum has now a Gallery Assistant who looks after the display and arrangement of exhibits in the museum

The Museum of Sarvajanika Wachanalaya, Nasik, has been set up recently It contains a good collection of old manuscripts, coins and paintings It is a part of the Municipal Library It is maintained out of the grants received for the Library No staff is appointed to look after this museum for want of adequate grants It has applied for central assistance through the Education and Social Welfare Department of the Government of Maharashtra

Museum of the Rajwade Samshodhan Mandal, Dhulia, has some manuscripts and old books The Institution has a fine library It publishes in Marathi a quarterly known as 'Samshodhaka' The Institution has been founded and developed by the efforts of Shri V K Rajwade, well-known historian and late Shri B W Bhat of Dhulia

Historical Museum at Ahmadnagar is also a recent creation It is founded by the Ahmadnagar Borough Municipality A Board of Trustees has been appointed to look after the activities of this museum A plot for the building has been allotted by Government of Maharashtra in the compound of Collector's office

Central Museum, Nagpur, has been the new addition to the total museums in Maharashtra It is the biggest among the 3 State Museums, *viz*, Aundh, Kolhapur and Poona It is also oldest among all museums in Maharashtra This museum before it came to Maharashtra was maintained by the Government of Central Provinces, the controlling officer being the Director of Industries The collection is housed in a Central Hall, two wings and two galleries having an exhibition area of 10,440 sq ft The east wing is divided into two rooms, the west into three, one being used as Library and the Curator's Office There is an Archaeological Assistant (Class II) Gazetted Officer to assist to the Curator There is archaeological section which contains ethnological collections There is a natural History section also The Museum has recently published a guide in English and Hindi This Museum is now placed in charge of the Director of Archives and Historical Monuments, Government of Maharashtra

The Government of Maharashtra, during the current financial year, have provided grants-in-aid to private museums amounting to Rs 1,58,000 and the total grants for Government Museums including the Five-Year Plans Scheme amount to Rs 3,00,700 It will thus be seen that Government of Maharashtra is alive to development schemes of several museums in Maharashtra

History of the Central Museum, Nagpur

The idea of founding a Museum at Nagpur was first taken up probably in response to the activities of the Antiquarian Society of the Central Provinces

On 27th October 1862, a Committee was convened at Nagpur under instructions from the officiating Chief Commissioner, conveyed in his Secretary's letter No 3392 of 20th October 1862 to the Commissioner of Nagpur, for the purpose of considering a plan for the establishment of a Museum and Public Library The Committee consisted of the following personnel —

1 Capt P Dods, Director of Public Instruction
2 Capt Cobbe, Assistant Secretary to C C, P W D
3 Rev S Hislop, Missionary Clergyman of the Free Church of Scotland Mission at Nagpur
4 Capt Hector Mackenzie, Secretary to C C
5 Capt J Ashburner, Deputy Commissioner

Lieutenant-Colonel Spence, officiating Judicial Commissioner, Capt Browne, officiating Commissioner, Mr M Beazeley, Civil Engineer, were also present The Committee considered the site for the building and also the objects of the proposed Museum and the Library The Committee submitted a plan of a building designed by Capt Cobbe which they thought would prove suitable for the purpose of the proposed institutions It comprised of a spacious hall 70′ × 25′ and 20′ high with a 10′ verandah all round The building was constructed at the cost of Rs 7,000

The Museum was established in 1863, when Mr Richard Temple was the Chief Commissioner of the Province The Government Circular issued on the 7th May 1863 (reproduced alongside) and the following extract from the work by Rivett-Carnac recalling *Many Memories of Life in India and Abroad* give an idea of the efforts made in the beginning for collecting exhibits for the Museum —

" The Province has always been, as Sir Alfred Lyall well describes it in his delightful verses printed later on, the Cindrella of India, and Temple, the new Governor, had to try and provide many necessaries which the more favoured Provinces had long enjoyed Thus a Museum was started, and all the zeal of the district officers and that of the native chiefs and landholders enlisted in the collection of objects of interest for the new institution The fiat went forth that every one was invited to bring into Nagpore all that was ' marvellous and rare ', and a special ' durbar ' or function was announced for the reception of the leading local nobles and landholders assisting in this meritorious object As is always the case, there was no small competition among the nobles to minister to the hobby, as it was regarded, of the great man But some earnest workers had rather vague ideas of the class of rarity suitable for a museum collection The durbar, to which all the leading people of the province had been invited, was opened with much state and ceremony in the great hall of the Residency Temple, seated on a red-velvet chair of state placed on a dais, commenced to explain the object of the assembly in an impressive speech in the vernacular, and dwelt on the desirability of all bringing in what was uncommon and ' rare ' and repeated and dwelt upon the word ' rare ' An old Chief from a wild part of the Province, who was seated in the front row, suddenly held up his hand as does a school-boy in

Central Museum takes form . . .

class when anxious to get in his reply to some question, and echoing the 'rare' with an excited yell shouted out, 'Yes Lord of the World, RARE' The old chap was quieted with some difficulty, and Temple, who was annoyed at the interruption, continued his address, returning in due course to his great point, the importance of collecting all that was 'rare' This was too much for the old chief Loudly re-echoing the 'rare', he struggled towards his servants, who were in the verandah of the hall watching the proceedings, and received from the hands of a retainer a young goat, which immediately commenced to make melody to the interruption of the formal proceedings Pressing forward to where the great man stood, and attempting to thrust the precious gift into Temple's hands, the old fellow held up a fifth leg, with which the goat was endowed, and which with its screams made it an object of much interest and attention to all the natives assembled The durbar was restored to order with no little difficulty, and not a few of the audience found it hard to understand why the great man was so little appreciative of a contribution which certainly in their eyes had the merit of being both marvellous and rare !!!"

The collections were enriched by acquiring exhibits from the Exhibitions held at Nagpur and Jabalpur in 1865 and 1866, respectively Mr Temple himself donated some specimens of porcelain from Worcester

In 1870-71, additions were effected by P W D when the building lost its municipal character and it became a provincial property The Museum occupied the Western wing of the building, while in the Eastern wing and the Central Hall were housed the Library and the Public Room where balls, theatrical performances, public meetings and examinations were held The Museum was at first supported by the Municipality Later on a grant was made from the local funds in order to meet the salaries, while the municipal contribution provided funds for contingent expenditure, purchase of new exhibits, etc A Museum Committee was set up which consisted of the Commissioner, Nagpur Division, Inspector-General of Education, the Deputy Commissioner, Nagpur and the Executive Engineer, Nagpur Division The Committee had power to co-opt such number of members, Europeans and 'Natives', as it might consider desirable (*vide* letter No 1455, dated 10th July 1871, from the Secretary to Chief Commissioner, C P to Commissioner, Nagpur Division) The Indian member of this Committee was Shri Nana Ahir Rao The Committee represented the whole Province and not Nagpur Division only The care of the Museum was at first in the hands of the Director of Public Instruction, but in 1883, it was made over to the Director of Agriculture

The Museum collections included specimens of Art and Industry and Archaelogical, Ethnological, Natural History, Forest, Agricultural and Geological exhibits which were displayed in two galleries on the west side of the Public Room Writing on the subject of the Museum in 1904, Mr Lely, officiating Chief Commissioner, C P, states, " its actual development has been academical rather than practical It has become rather haphazard collection of curiosities than an agency to keep pace with and quicken the life of the Province" However, it is interesting to know how in such a condition also the Museum could be of immense help to Mr Tata in locating the iron-ore deposits in the Drug District and ultimately in establishing the Iron and Steel Works at Sakchi (now Jamshedpur) Then Mr Dorabji Tata accompanied by his associate Mr C M Weld, an energetic man from New York had come to Nagpur some time in 1903 to see Sir Benjamin Robertson, the then Chief Secretary of the Central Provinces Administration and to inform him about the conclusion they had arrived at regarding the Chanda project and starting of Iron and Steel Industry in India

Mr F R Harris in his book entitled *Jamsetji Nusserwanji Tata* (London, 1925) writes at page 184 as under

"At this stage one of those chance incidents which make or mar all great enterprises stirred their energies afresh Mr Dorabji Tata went to Nagpur to see Sir Benjamin Robertson, then the Chief Secretary of the Central Provinces

Administration, to inform him about the conclusion they had arrived at The Chief Secretary happened to be out, so he drifted rather aimlessly into the museum opposite the Secretariat to await his return There he came across a geological map of the Central Provinces, printed in colours He noticed that the Drug District, near Raipur, about 140 miles from the Chanda area, was coloured very darkly, in a hue which was meant to indicate large deposits of iron He called Mr Weld, who had accompanied him, to look at the map Mr Weld recollected that he had seen some mention of the district in the reports of the Geological Survey In a case in the museum, they found a specimen of very good iron ore from the Drug area Let no one say after this that Museums in India serve no useful purpose"

With the establishment of the Agricultural College and a Museum in the Technical Institute, the Forest, Agricultural and Geological exhibits were transferred to that institution leaving the Archaeological and Ethnological exhibits, manufactured goods and Natural History exhibits in the Museum

Attention was first directed to organise the Archaeological section and services of Pt Basant Ram, Pt Hiranand Shastri and Pt Natesan Aiyer were obtained for the same Pt Aiyer prepared descriptive lists of exhibits in the Archaeological Section of the Museum when he was working as Archaeological Assistant in the Museum These lists were published in 1914 The Arts and Industry Section and the Ethnological collections also received due attention Collection of ethnological material was made on the lines suggested by Mr Russell The Ethnological collections were enriched by acquiring the collections of Chhindwara Gonds made by the late R B Hiralal in 1913, which led to the organisation of Ethnological Section A primary incentive for making collection of ethnological exhibits was due to a request from the British Museum that typical exhibits from the various tribes, races and castes in the Central Provinces be kept for reference in London A complete set of exhibits was sent to the British Museum, London

In 1914 two sets of proposals regarding future extension of the Museum were submitted to Government one had reference to immediate requirements of the Museum and the other referred to certain additions to it which were necessary to enable it to take part in the teaching of the proposed Central Provinces University In the former scheme there was provision for Natural History, Ethnology and Archaeology as three separate Sections In proposing the scheme Mr Graham says, "As Curator of the Museum my idea is to have an institution in Nagpur worthy of the Central Provinces and Berar The Museum will be unique in that collection will be local and hence there will be no competition with all India institutions such as the Indian Museum The value of having local material for teaching purpose cannot be over-estimated Not only will it stimulate interest in the natural features which surround the student's path on every side, but material for investigation will always be available to those who wish to pursue their studies further"

Mr R J D Graham, the last honorary Curator retired in 1916 when Mr D'Abreu succeeded him Since the latter's appointment first as Assistant Curator in 1911 and then as Curator in 1916 a thorough reorganisation of the Natural History Section had taken place Large additions were made to the collections of birds, small mammals and reptiles The collection of birds, eggs and nests was a new feature

In 1919 when the Governing Body of the Victoria Technical Institute handed over the whole of the Economic Museum to the Central Museum it became overcrowded The Public Room was then absorbed into the museum In the same year Shri M A Suboor was appointed as Coin Expert In this year the control of the Museum was transferred to the Department of Industries In the following years the Geological Section was reorganised for which the services of Mr (now Sir Cyril) C S Fox of the Geological Survey were utilized In 1923 an Emporium of Cottage Industries Products was opened in the Museum

The increasing number of exhibits in each section demanded extensions to the building which were completed in April 1927 They consisted of one room 60'×30' on the east of the main building and two 30'×30 each on the west side which afforded facilities to display the collections section-wise

In April 1929 the Museum Fund for which Government contributed substantially by way of grant-in-aid was abolished and the Museum was provincialized

Mr D'Abreu not only displayed the invertebrate and vertebrate fauna of the province in the galleries but also enriched the reserve collections which formed the basis of several Records and Bulletins published by the Museum He retired in 1936 when Dr S S Patwardhan who was also a Naturalist succeeded him In 1944 Shri Suboor retired when his post was abolished A new post of Archaeological Assistant was created to which Shri V P Rode was appointed During the last fifteen years the Museum got technical posts of Artist, Photographer, Taxidermist and a Guide-Lecturer and also a post of Anthropological Assistant

Since the Independence of the country in 1947 the museum activities have been directed towards reorganising the galleries on modern lines When the roof of the two wings was overhauled it offered an opportunity to reorganise the Arts and Crafts, the Archaeological and Anthropological Sections The Emporium and the Economic Sections were closed

In 1953 a Regional Museum was started at Raipur when selected exhibits from that area were transferred to that institution from the Nagpur museum In 1955 the Museum was made over to the Education Department Since reorganisation of the State, in 1956, the Director of Education, Poona, became the Controlling Officer of the Museum

In June 1959 Dr S S Patwardhan retired from service when Sarvashri T A Apte and Muttalib held in succession the additional charge of the post of Curator till 19 , when Shri V P Rode was appointed officiating Curator

From September 1962 the Museum has been put under the State Department of Archaeology, the Controlling Officer being the Director of Archives and Historical Monuments, Government of Maharashtra, Bombay

Since the year 1959-60 the Museum has been receiving Government of India grant for its reorganisation and development It has, therefore, been possible to reorganise three galleries on modern lines In the Bird Gallery the cases have been provided with big-size glass panes, concealed fluorescent illumination and continuous panelling The Arts and Craft Section housed in the Central Hall has been thoroughly overhauled providing complete panelling giving flush effect In the Picture Gallery wooden panelling for the entire wall space has been provided and the paintings rearranged The Museum has been able to publish short Guide Books and Folders in English, Hindi and Marathi and two sets of Picture Postcards It has purchased equipment such as Epidiascope, Film Projector and a Water Cooler

The Central Museum is the oldest and the biggest Museum in Maharashtra It has at present ten galleries which are filled to capacity The Museum serves as an important medium for education and aims at interesting a student and a general visitor in natural surroundings, the history, culture, art, social and economic conditions of the country and development in science and technology A Scheme for further extension of the building has been submittted to Government It is expected to be, very soon, a multi-purpose museum devoted to Art and Archaeology, Anthropology, Natural History, Science and Technology There will also be a special Children's Section It will arrange for Guide Service, periodic Exhibitions, Film shows and Lectures for which provision of a Multi-purpose Hall has been made in the Scheme To commemorate the occasion of the Centenary of the Museum an Art Gallery is being constructed which is expected to be completed during the current year

Scope and Collection

The Museum collections are mainly provincial (ex-C P and Berar) They are divided

into six sections, *viz*, (1) Art and Industry, (2) Archaeology, (3) Anthropology, (4) Picture Gallery, (5) Geology and (6) Natural History Besides the articles exhibited in the public galleries there are large reserve collections which are available for study on application to the Curator

The Central Hall is devoted to the Art Section The East Wing with four rooms is for Natural History and the West Wing with four rooms is allotted to Archaeology, Anthropology and the Picture Gallery The Geology Section is housed on the first floor

At the entrance of the Galleries large paintings symbolishing the collections displayed have been introduced wherever possible

Arts and Crafts Section —It is housed in the Central Hall There is a model in plaster "Return from Field" done by Shri Pandhye of Khamgaon The metal-ware exhibited in the Gallery includes engraved and perforated metal-ware from Banaras, bell metal-ware from Mandla and the brass lamps from Bhandara which are interesting The samples of horn-work include a candle-stand from Ratnagiri (Maharashtra State) which is a remarkable piece of workmanship The specimens of ivory work include a figure of Lakshmī which is a remarkable piece of art In specimens of textile fabrics gold-thread Saris from Burhanpur deserve special mention The selected specimens of other are textile fabrics from India from the collection made by the Secretary of State for India in 1866 In the specimens of wood carving "Harvest" from Bombay deserves special attention Wooden models of fruits and vegetables from Gokak (Belgaum District, Mysore State) attract attention of all visitors A silver model of a "Chhakra" which was donated by the late R B A V Kaptan is an interesting piece of art The specimens of pottery exhibited in the gallery include Victorian porcelain from Worcester presented by Sir Richard Temple in 1867 There is a set of illustrated and illuminated manuscripts from the collections of the late Raja Bahadur Raghoji Bhonsle The profusely illustrated *Bhāgavata* deserves special mention There are a few specimens of Burmese Art received from Shri Mande, Nagpur

Archaeological Section —This is one of the richest sections and occupies two galleries The collection of pre-historic exhibits includes Stone Age, Copper Age and Chalcolithic Age antiquities The interesting Copper Age antiquities are from Gungeria (Balaghat District, M P) discovered in 1870 The Scultpure Gallery is one of the main attractive features of the Museum It contains mostly medieval Sculptures The noteworthy sculptures in the gallery are Lakshmīnārāyanā from Chanda Vishnu from Seoni, Mukhalinga from Nemar, Śiva from Padamapur and Mahāvira from Jabalpur Museum collection of Jain Bronzes from Rajanāpur Khinkhini (Akola District) of about the 9th-10th Century A D, includes some, interesting pieces such as Sarasvatī, Yaksha-dampati and Sumatinātha Two early sculptures assignable to the 1st Century A D, come from Bheraghat and are exhibited in the Porch In the Inscription Gallery there are copper-plate and stone inscriptions ranging from 3rd Century B C, to the 17th Century A D, which throw considerable light on the history of the country A number of copper-plate and stone inscriptions of the Vākātakas, the Rāshtrakutas and Kalachuris have been edited by M M V V Mirashi Two of the Copper plates have been received as donations from Shri Harshe of Sagar and Shri Upasrao Mahadik, Nagpur Notable among the stone inscriptions is the Deotek slab bearing the two inscriptions of the time of Asoka and Vākātaka Rudrasena I The collection of coins which is kept in safes is quite representative and contains the interesting Punch-marked coins of the Sātavāhanas, the Kshatrapas, the Guptas, Mahendrāditya and Prasannamātra, the Nalas, the Kalachuris, the Paramāras, the Chālukyas and the Yādavas which have been published in the *Journal of the Numismatic Society of India* The collection of coins of the Sultans of Delhi and their contemporaries and the Mughals and their contemporaries is also fairly rich which contains some interesting and rare

coins also The work of preparing a catalogue of all the coins in the Museum has been taken up An interesting Babylonian seal which dates back to about 2000 B C, the period of the First Dynasty of Babylon, deserves special mention

Anthropological Section—A large portion of the collection consists of articles used by the Gonds, Oraons, Korkus and other aboriginals There are clothes, head-gears and foot-wear, ornaments such as necklaces, mālās, belts, armlets and anklets, nose and ear-rings and pendants, household articles including receptacles for food and water, basketry, fire-making appliances, tinder-boxes, combs, umbrellas, etc The musical instruments comprise wooden clappers, gongs and bells, jingles, single and double-faced drums, flutes, buggles and trumpets and a variety of stringed instruments The material collection has been supplemented by enlarged photographs, (many of them coloured) of dance and other scenes of tribal life obtained from field The Gond memorial sculptures, particularly the elaborately carved pieces which depict hunting and battle scenes, are very interesting The collection in this section has been recently enriched by acquiring dresses and ornaments of the aboriginals A set of dresses was also supplied to the National Museum, New Delhi

The Picture Gallery—It is only recently started and comprises mostly modern Indian Paintings These paintings may be grouped under three heads, *viz*, Portraits, Compositions and Landscapes The group of portraits contains the works of Sarvashri M V Athwale, S L Haldankar, Wadanagekar, M Satavalekar, and M R Acharekar and others "Nirānjani" by S L Haldankar deserves special mention In the group of Compositions are included the works of Sarvashri S Chawda, A A Almelkar, V S Gurjar, G S Haldankar, J D Gondhalekar, M Satawalekar, K K Hebbar, A A Raiba, D D Dalal, V Masoji, W V Karanjkar, Kum Dhurandhar and Smt B Prabha

In the group of landscapes works of Sarvashri, P A Dhond, V. R Amberkar, V B Dehadrai, Prof W Langhammer, S H Raza, Paulraj, Hanumaiya and M S Joshi are included "Dhoopchhao" by Shri Paulraj deserves special mention

The collection of old Indian Paintings, though small, is representative of principal styles of paintings There are specimens of Mughal, Rajasthani, Kangra and Deccani styles of paintings which include specimens received as donations from Sarvashri. Waikar and Subhedar, Nagpur "Hathi Peetambar" of the Rajasthani style and "Complaint about Krishna" of the Kangra style, deserve special mention There are two Nepali and Bhutani banners An old portrait of Mahādaji Scindhia is said to have been drawn from life by an Italian artist It is received from the Government of India

Geology Section—Exhibits in this section are divided into four groups (1) Type rocks, (2) Type minerals, (3) Minerals of economic importance and (4) Fossils

Type rocks are grouped as Igneous, Sedimentary and Metamorphic The structural rock series include fine specimens of dendritic markings, concretionary nodules, ripple marks, flexible sand-stone and pebbles from the bed of the river Narmada The type mineral series is arranged acid-wise and base-wise. Samples of minerals of economic importance comprise ores of manganese, iron and copper, coal, bauxite, wolfram, lime-stone, clay, ochres, graphite, mica, asbestos, galena, salts, and semi-precious stones, specimens of building stones, road metal and murrums Minerals utilised in different industries such as heavy chemicals, pottery, glass, paints and iron and steel are separately shown

The fossil collection comprises specimens of Plant, Invertebrate and Vertebrate fossils discovered in the region and supplemented by exotic specimens Rev Hislop's collection of fossils deserves special mention

The Natural History Section—It is divided into (1) Bird Gallery (2) Reptile Fish and Invertebrate Gallery and (3) Mammal Gallery.

Bird Gallery—In this gallery there are four habitat groups The rest of the gallery is devoted to display of systematic collection of birds found in Vidarbha and Mahakosala region The collection is fairly representative, over 200 species being exhibited The birds which deserve special attention are White crow, Bengal Treepie, Malabar Whistling Thrush, Racket-tailed-Drongo, Green Bulbul, Red and Scarlet Minivet, Shyama, Oriole, Paradise-Flycatcher, Bastar Myna, Baya, Shikra, Pitta, Hoopoe, Malabar Hornbill, Crested Cuckoo, Cinereous Vulture, Brahmini Kite, Black Winged Kite, Osprey, Indian Coot, Emerald Dove, Great Indian Bustard, Flamingo and Spoon-bill

The nesting groups have been interposed between the systematic collection at intervals

Reptile, Fish and Invertebrate Gallery—The attractive feature of the gallery is a habitat group showing the Indian Crocodiles In the wall-cases are displayed Gacko, blood-sucking and monitor Lizards, Chameleons, and Skinks There are pythons and other poisonous and non-poisonous snakes found in the State

The Fish collection is exhibited in the three wall-cases There are fresh-water fishes from Vidarbha and Mahakosala The large specimens of Bam, Singhala, Nila, Mahaseer, Maral, Phulmaral and Rohu are of special interest These exhibits are supplemented by display of marine fishes both cartilagenous and bony, obtained from Madras The amphibian fauna includes species of frog and toad found locally, stages in the development and metamorphosis of a frog and a habitat group of these animals

In the Invertebrate Gallery marine shells are displayed in the wall-case while insects representing their diffierent orders are shown in a series of show-cases in the centre of the hall

Mammal Gallery—The large-hoofed mammals include Blue-bull, Sambhar, Black-buck, Chittal, Chinkara, Barking Deer, Four-horned Antelope, Mousedeer, and Bison In the carnivora are included Sloth Bear, Leopard, Wild-cats, Hyena, Wolf, Jackal, Fox and Wild Dog Among the small mammals there are Porcupine, Hare, flying and other Squirrels, Bats, Civets, Mongoose, Otter, Ratel and Pangolin The primates are represented by Bandar and Langoor Selected specimens of horns and head-mounts of big games are displayed on the wall

The collection of large mammals is displayed in a big show-case against a background displaying the beautiful colour scheme of a morning sky at horizon The most attractive part of the Gallery is the habitat groups, *viz*, of Indian Tiger, Leopard and Chittal These animals are shown in an illuminated case in their natural surroundings with appropriate ground scenery and a suitable background painting There are preparations illustrating well-known Aesop's Fables with the use of taxidermical preparations of animals concerned They have provided a good attraction particularly to the school children

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An Account of the Three-day Programme of the Centenary Celebrations

November 29th, 1964 has a special significance in the history of the Central Museum, Nagpur, as on this auspicious day, the Centenary Celebrations of the Museum were inaugurated by Dr Zakir Husain, Vice-President of India

The Vice-President of India accompanied by the Finance Minister, the Minister for Education and the Deputy Minister for Education, Maharashtra State, arrived at the Museum at 4 00 p m when he was received by the Director of Archives and Historical Monuments, Government of Maharashtra The Secretary, Education and Social Welfare Department, Government of Maharashtra, was also present on the occasion

The Vice-President of India was requested to kindly unveil the Centenary Plaque which is placed at the entrance of the Museum He was then conducted through the galleries including the Central Hall in which a Special Exhibition of selected Exhibits from the Aundh and the Kolhapur Museums and from the collection of Shri S B Kulkarni and Shri Salpekar of Nagpur was arranged He showed keen interest in the exhibits and wrote appreciative remarks in the visitors' book before leaving the Museum for the main function at the University premises

Before the Vice-President of India reached the University premises the specially erected pandal was already full As he stepped in the pandal, everybody present rose from his seat to pay respects to the Vice-President of India

The inaugural function began with a prayer which was followed by reading of messages by Shri V P Rode, Curator of the Museum The messages received included those from the President of India, the Prime Minister of India, the Governor and the Chief Minister of Maharashtra, the Chief Ministers of other States, the Central Education Minister and prominent political and social leaders in the country

After the reading of messages Dr P M Joshi, Director of Archives and Historical Monuments, Department of Archaeology, read the report of the Museum Referring to one of the rare events that go 'to make or mar ambitious ventures', Dr Joshi said that the museum had amply justified its existence by guiding the late Mr Tata towards Durg in search of iron ore Mr Tata had been to Nagpur to report to the then C P Government of his failure to find deposits of iron ore and also his decision to give up the venture to start a steel mill Shri M D Chaudhari, Minister for Education, delivered the welcome address in which he said that the Celebrations were being held on the oldest of soils, inhabited by the oldest of tribes in the heart of an area covered by the ancient kingdom of Vidarbha on one side and that of Mahakosala on the other The Minister for Education appealed to the public to co-operate in the task of expanding the scope of the Central Museum and pointed out that most of the public places of importance in Bombay came into existence through the munificence of the people He hoped that Nagpur as the second capital of the State would follow suit He then requested the Vice-President of India to kindly declare the Centenary Volume published and to inaugurate the Centenary Celebrations After declaring published the Centenary Volume, the Vice-President of India said that he considered it a privilege to be able to inaugurate the Celebration of hundred years of a museum in the very centre of the country, a museum which was among the oldest museums in India

Dr Zakir Husain traced the history of the museums in Europe and India He also dwelt on the progress made by this Museum since it was set up in 1863 and referred in particular to the archaeological section and said that it had interesting material to illustrate the culture of Central India, a meeting place of several dynasties of rulers from the earlist times Sculptural and epigraphical material, as also coins and a variety of arms and armour are a fine representative collection The Anthropology, Geology, Zoology, Art and Industry section and the Picture Gallery were also noteworthy and the Museum had been well-maintained

It was heartening to note, he stated, that there has been concentration on educational activity also He referred to the series of publications by the Museum on sculpture, rock paintings, etc and paid high tributes to the work done by Dr S S Patwardhan, the former Curator, and Shri V P Rode, the present Curator, and said that the Raipur Museum had in fact grown out of the Nagpur Museum He said "I am sure that this Celebration of the Centenary would be a fitting occasion for the Museum to further the cause of Education by taking up a Centenary series of publications to produce exhaustive and descriptive catalogues of the rich archaeological, geological and other material housed in this institution It would be also probably a fitting thing for the Nagpur Museum, being centrally located, to enlarge the scope of its archaeological section following a vigorous policy of exchange, acquiring typical examples of every school from the north as well as south, east and west to represent a complete history of Indian Culture through sculpture, architecture, inscriptions and coins in the archaeological field

The presence of veteran scholars like Mahamahopadhyaya Dr V V Mirashi at Nagpur itself in the University would help close co-operation from the University also in furthering the educational activity of this important Museum"

Shri S K Wankhede, Minister for Finance, who presided over the function in the absence of Shri V P Naik, Chief Minister of Maharashtra, said that the very concept of museums had undergone a vast change, today they are being looked upon as a school of culture and history Viewed in the perspective Shri Wankhede admitted the Nagpur Museum would secure only 'passing percentage' He hastened to add that the present inadequacies of the museum would sooner than later be overcome The State Government was anxious about the progress of the place, had already set up a museum advisory committee and had also secured Central Government's assistance for its building The Finance Minister announced that the Lions Club of Nagpur which had decided to set up a Children's Park in Nagpur in memory of 'Chacha Nehru' has accepted the uneven space behind the Museum for development into a Children's Park

Dr N N Kailas, Deputy Minister for Education and Chairman of the Centenary Celebration Committee, proposed a vote of thanks to the Vice-President of India, the Chief Guest, the Minister for Finance and all those who were present He stressed the need for munificent contribution from the leading citizens of this City, the second capital of the State, to make the museum achieve a greater status

He thanked the Mayor of Nagpur Corporation, the Commissioner, Nagpur Division, members of the State Committee and the Reception Committee, donors, advertisers to the Souvenir, the Collector of Nagpur and other regional heads who helped in making the Celebrations a success The inaugural function closed with the singing of the National Anthem

Copies of the Centenary Volume and the Souvenir were given to the distinguished invitees and the press representatives

In the evening was arranged the dance ballet "Chhatrapati Shivaji" which was presented by Shri Sachin Shankar Ballet Group from Bombay It was witnessed by the Vice-President of India

On the following day, i e, 30th November 1964 at 5-30 p m Shri P J Chinmulgund, I C S, delivered a Centenary Lecture on 'Indian Numismatics' at the Vidarbha Sahitya Sangha In his speech he made some very useful suggestions on exhibition of coins in a Museum He pointed out that the orthodox method of keeping coins arranged in trays (according to dynasty rulers and their issues) in a safe or strong-room and exhibiting a few specimens in original or their plaster casts helps the students and scholars interested in Numismatics but the general public visiting the museum gets no idea at all of the collection in the museum or of the importance of coins as sources of history and culture or of the importance of the Science of Numismatics He said that this system should change if the general public are to take an interest in Numismatics He suggested that the storage of entire collection in trays in the safe or strong-room may be continued and periodic exhibitions of coins in museum should be held emphasizing various aspects of Numismatics Dr N N Kailas, Chairman of the Celebration Committee, introduced the speaker Mahamahopadhyaya Dr V V Mirashi presided over the Lecture while Dr P M Joshi, Director of Archives and Historical Monuments, proposed a vote of thanks

At night was arranged a Marathi Drama 'Char Katha Eka Vyatha' staged by the Ranjan Kala Mandir, a local dramatic association which has been receiving the first prize for the last three years in the State Drama Festival

On the third day of the Celebrations, i e, on 1st December 1964 was arranged a second Centenary Lecture by Mahamahopadhyaya D V Potdar on 'A new way to preserve our monuments' He said the Collection and Preservation of ancient monuments which are scattered all over the country are a big problem before our nation It requires a huge amount which we have not got Since the work has got to be done a beginning should be made for which he made some very valuable suggestions One of his suggestions was that the work of collection of scattered monuments may be entrusted to the village Panchayats while that of recording them might be done by the teachers in the villages For this Lecture also Mahamahopadhyaya Dr Mirashi was in the chair, Dr N N Kailas, Chairman of the Celebration Committee, introduced the speaker while Dr P M. Joshi, Director of Archives and Historical Monuments, proposed a vote of thanks The museum building which had assumed a festive look was flood-lit during this period

The three-day programme of the Centenary ended with this second lecture but the special Exhibition which was scheduled to last for a week only had to be continued for a fortnight It became so popular that this period had to be extended by one more week Every day thousands of people visited this special exhibition from 9 a m to 7-30 p m throughout the period Among the distinguished visitors to the Exhibition mention may be made of the visit of Dr Cherian, Governor of Maharashtra and Mrs Cherian

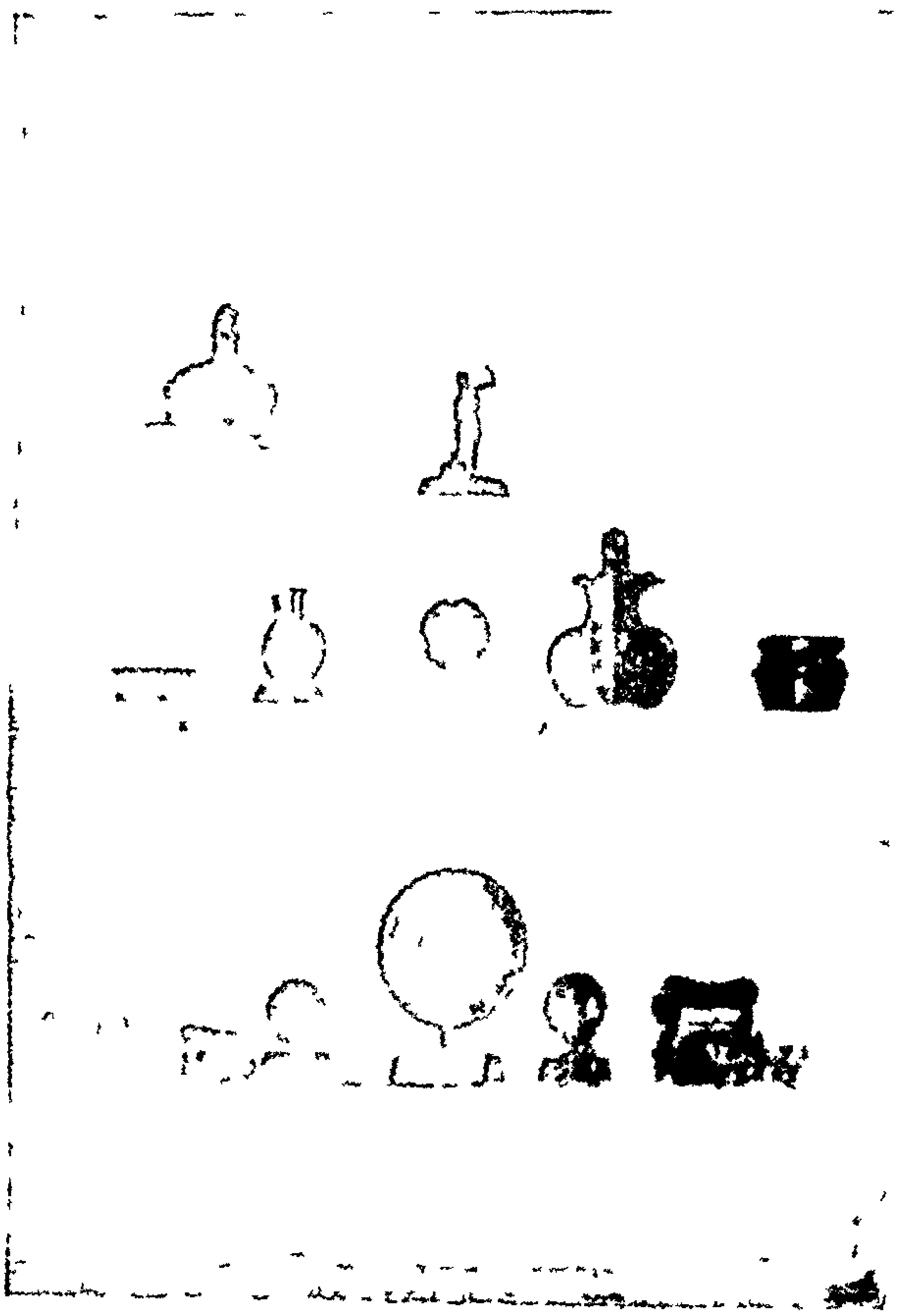
The main attraction of the exhibition was the collection of paintings from the Aundh and the Kolhapur Museums which included the famous works by Sarvasri Raja Ravi Varma, Muller, Abalal Rahaman, Baburao Painter, Thakur Singh and Ravindra Mestri The other interesting and valuable exhibits included the Bronzes of the Satavahana period, from Brahmapuri a part of the Kolhapur town, which threw a considerable light on the close contact India had with the Greek and Roman civilizations during that period

A fine local collection of illustrated and illuminated manuscripts which included a commentary on Bhāgvata, Jñāneshvari and Eknanatha's Bhāgvata deserves special mention The Jñanesvari belonged to Shri Salpekar while other works were from the museum collection There was also an interesting collection of brass lamps and nut-crackers which belonged to Shri S B Kulkarni of Nagpur

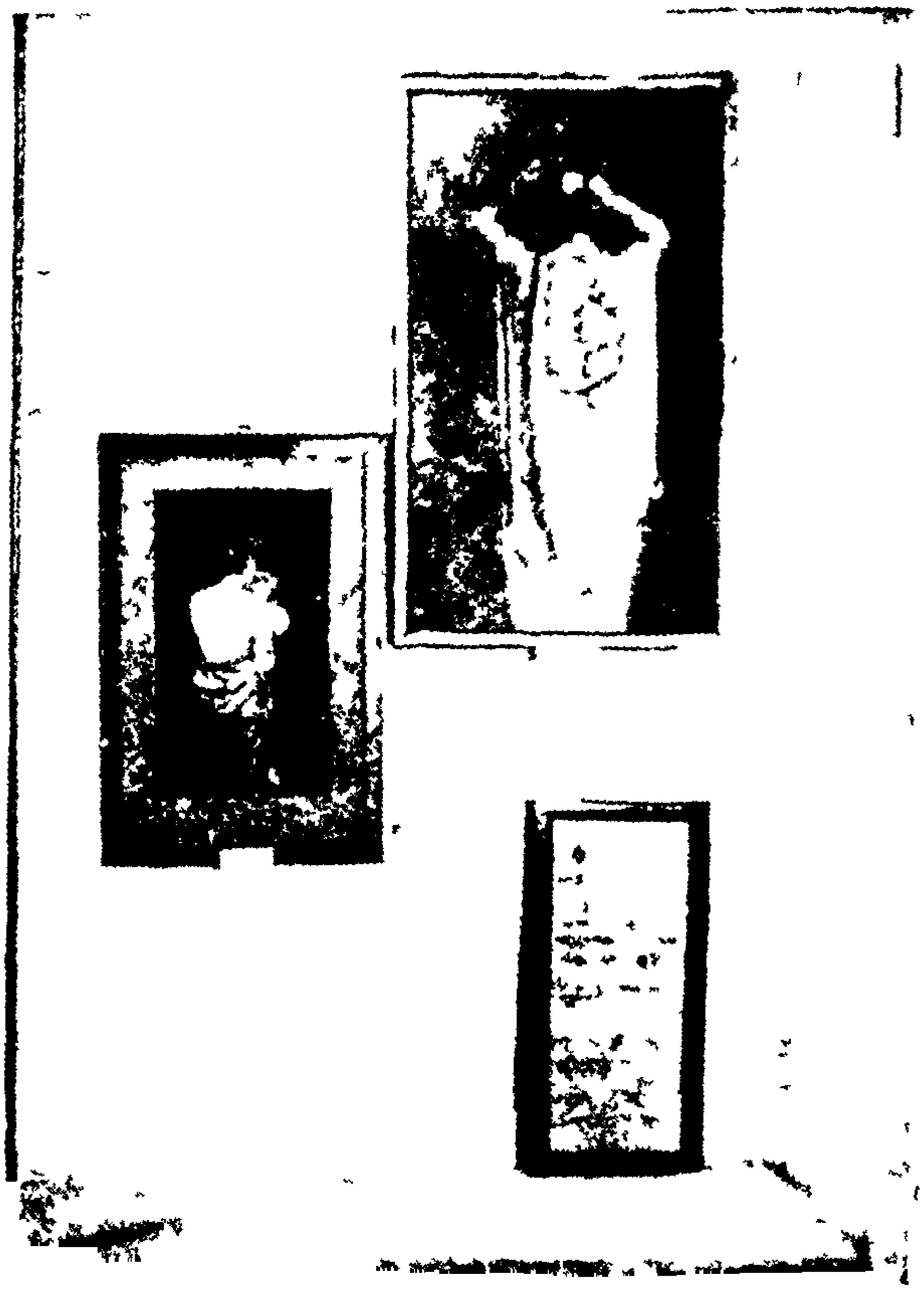
A permanent memorial of the Centenary in the form of an Art Gallery will soon be completed for which the Government of Maharashtra has sanctioned a grant of Rs 1,00,000 Very soon the entire premises will assume a new look with the addition of the Art Gallery and the Chacha Nehru Children's Park

48 Dr Zakir Husain, Vice President of India, unveiling the Centenary Plaque

49 The Vice-President in the Central Hall



50 Exhibits from the Kolhapur Museum
(Special Exhibition)



51 Exhibits from the Aundh Museum
(Special Exhibition)

52 The Vice President in the Sculpture Gallery

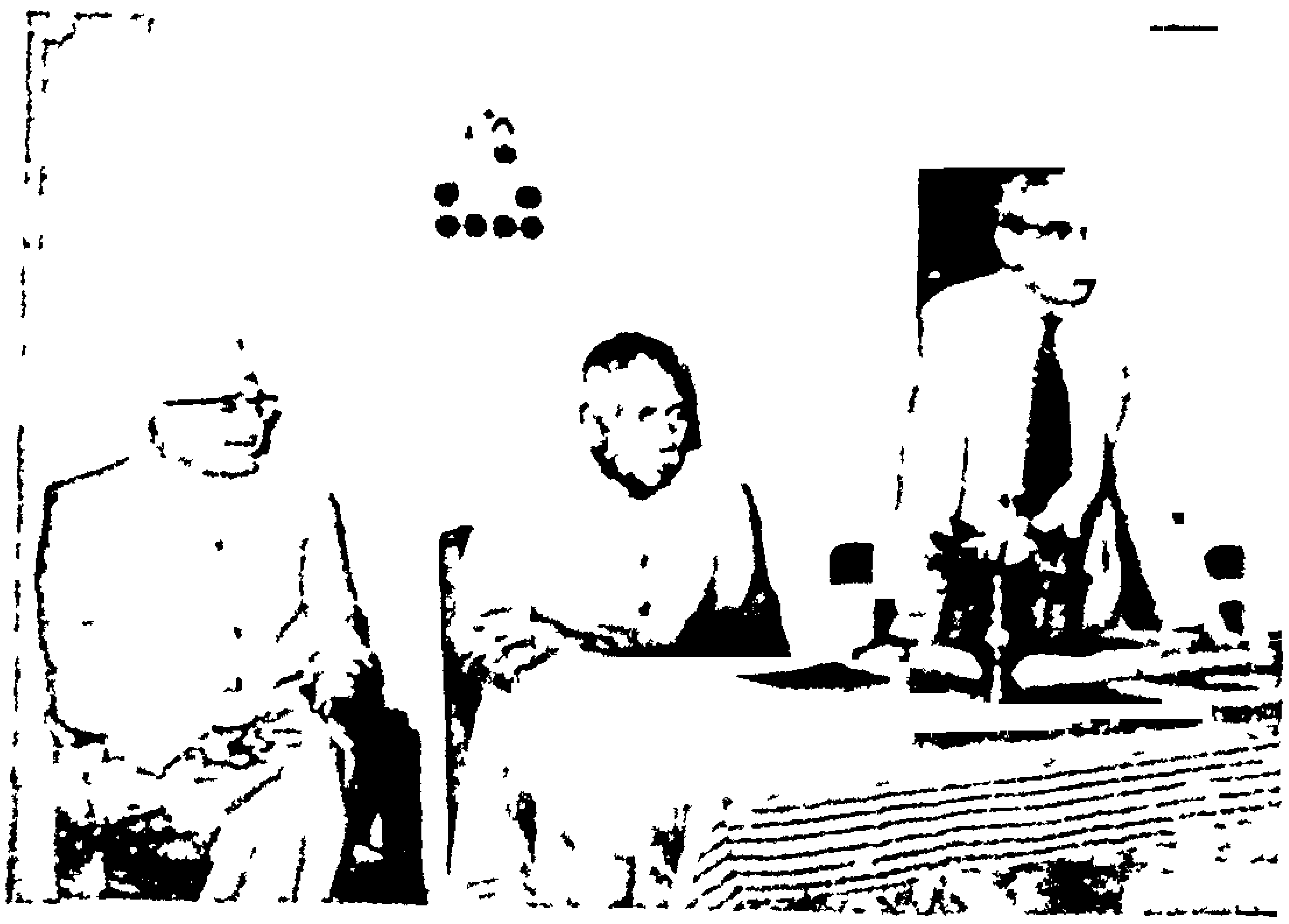
53 Dr Zakir Husain inaugurating the Centenary Volume

54 The Vice President delivering his Inaugural Address

55 Dr N N Kailas, Deputy Minister for Education, and Chairman, Centenary Celebration Committee, proposing a vote of thanks

56 A scene from 'Chhatrapati Shivaji' dance ballet by Sachin Shankar

57 A scene from the drama 'Char Katha Ek Vyatha'



58 Shri P J Chinmulgund delivering the Centenary Lecture

59 Mm D V Potdar delivering the Centenary Lecture

60 Building of the Museum

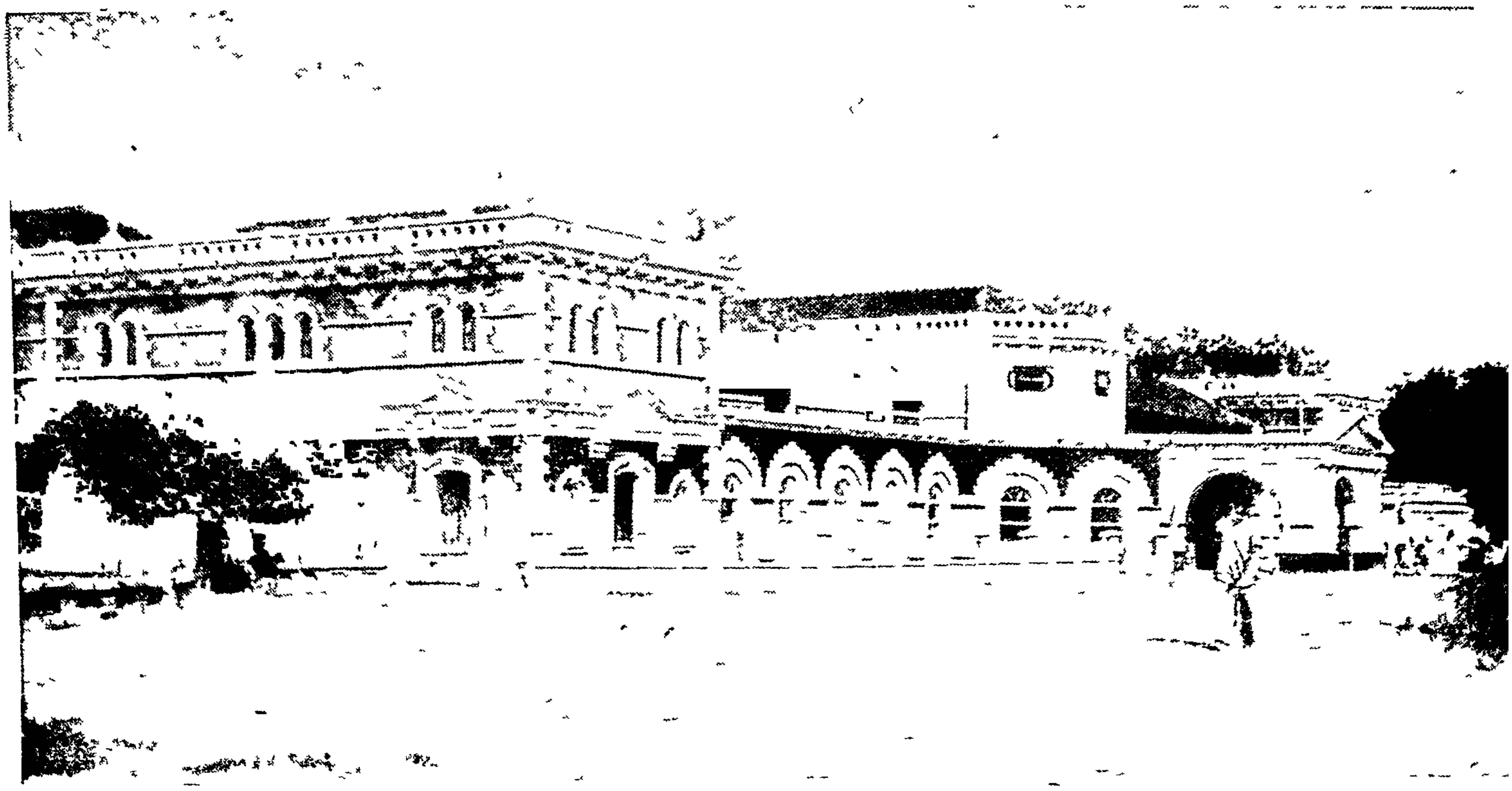
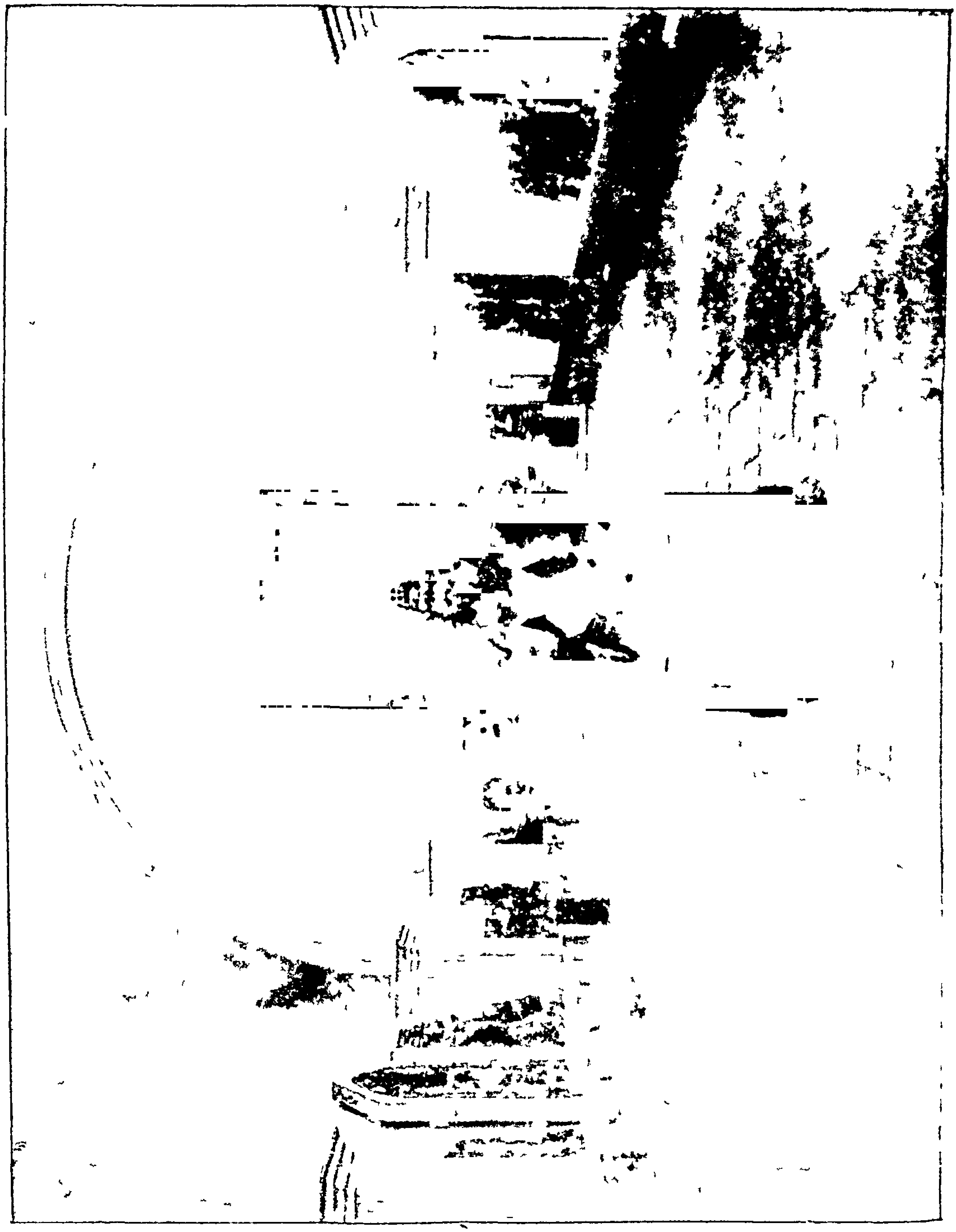
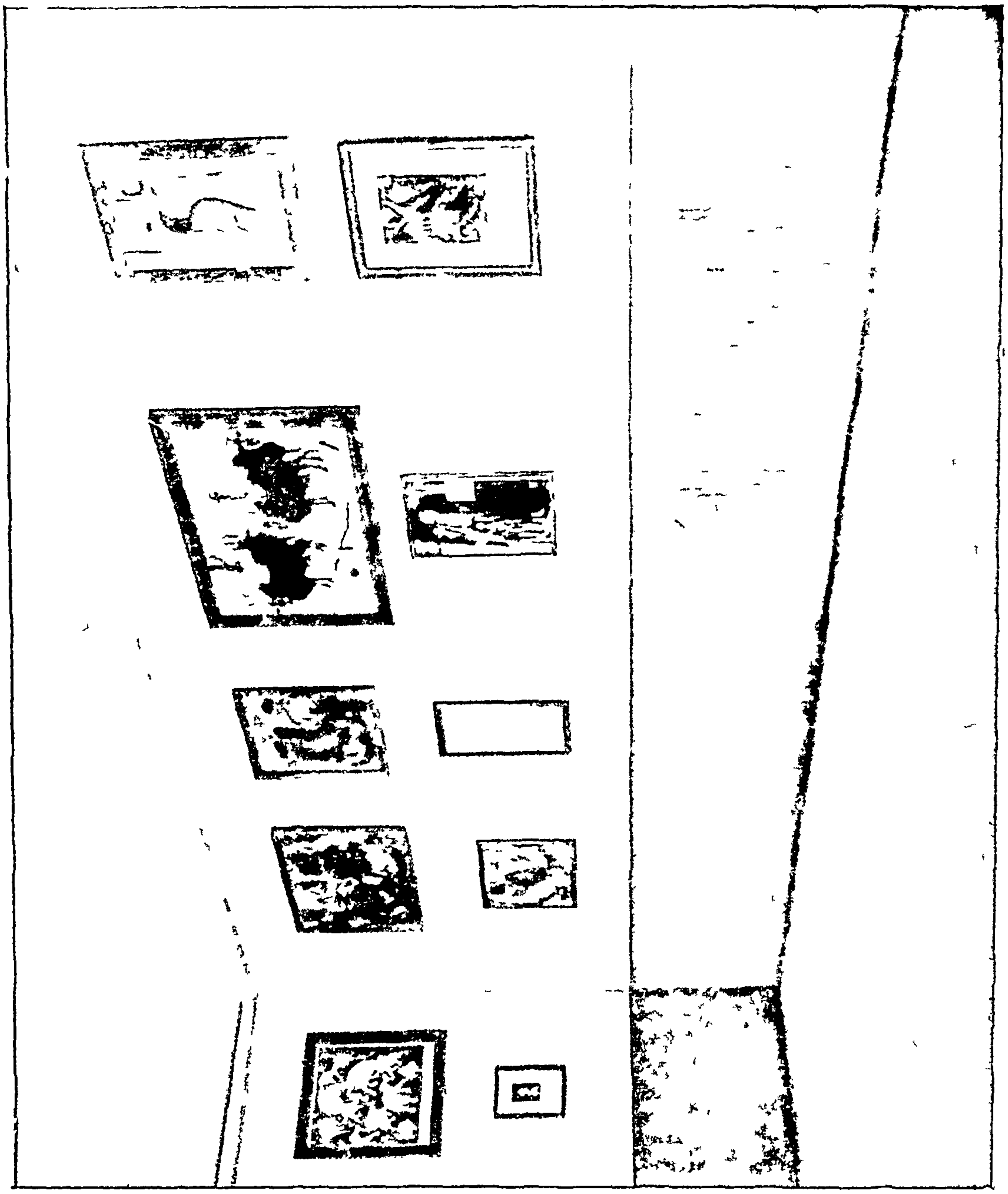


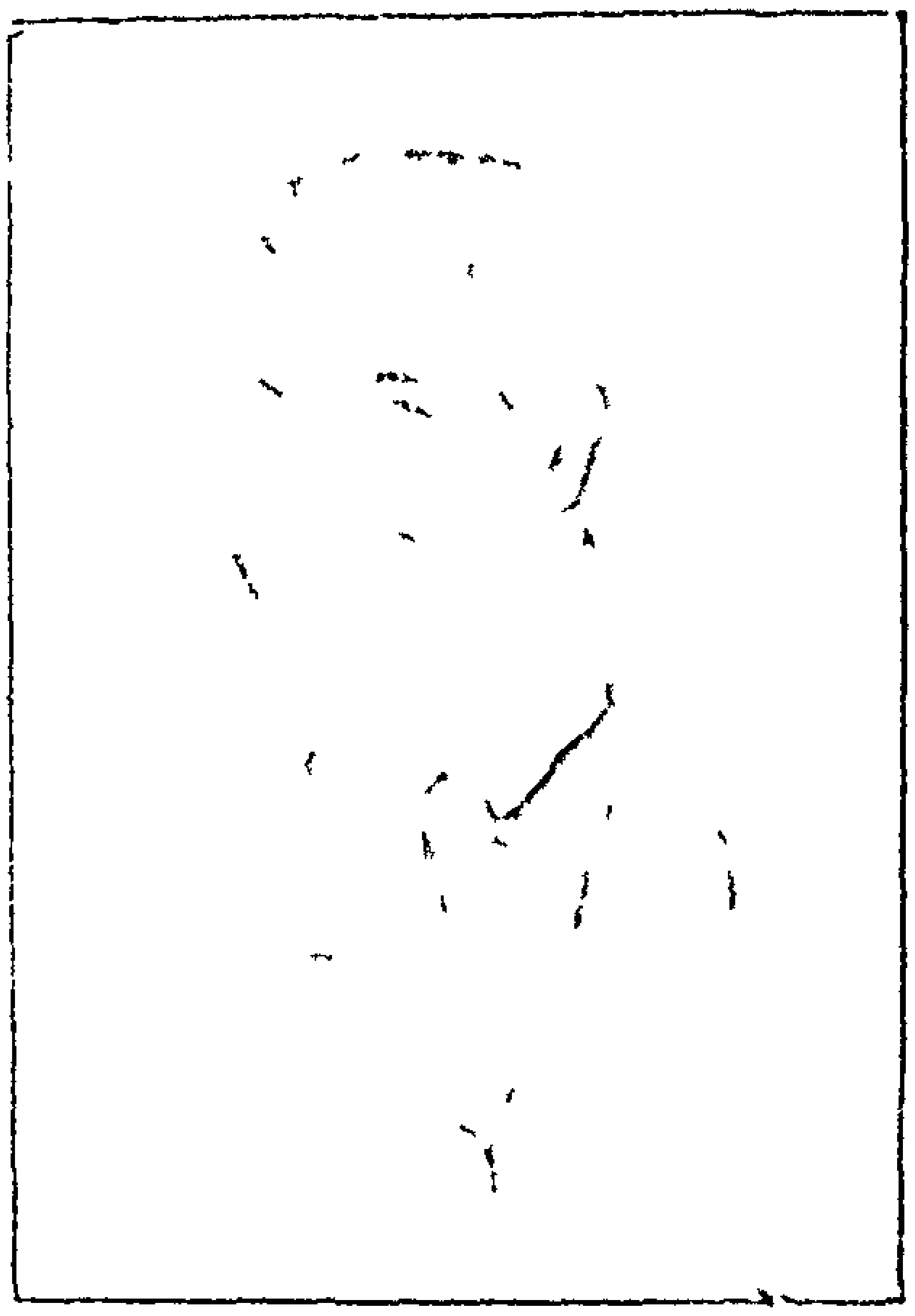
PLATE XLI



61 General view of the Sculpture Gallery

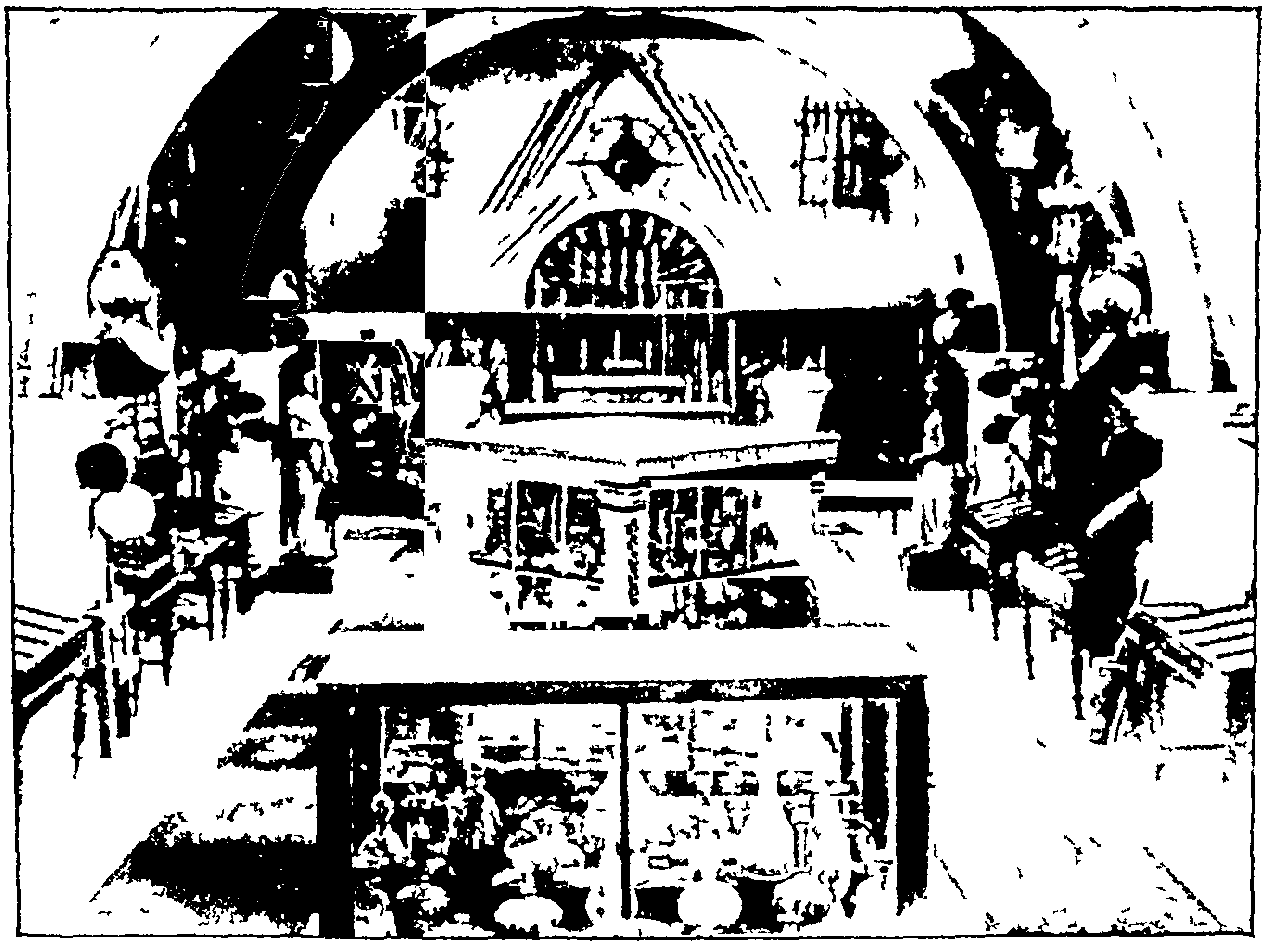


62 View of the Picture Gallery

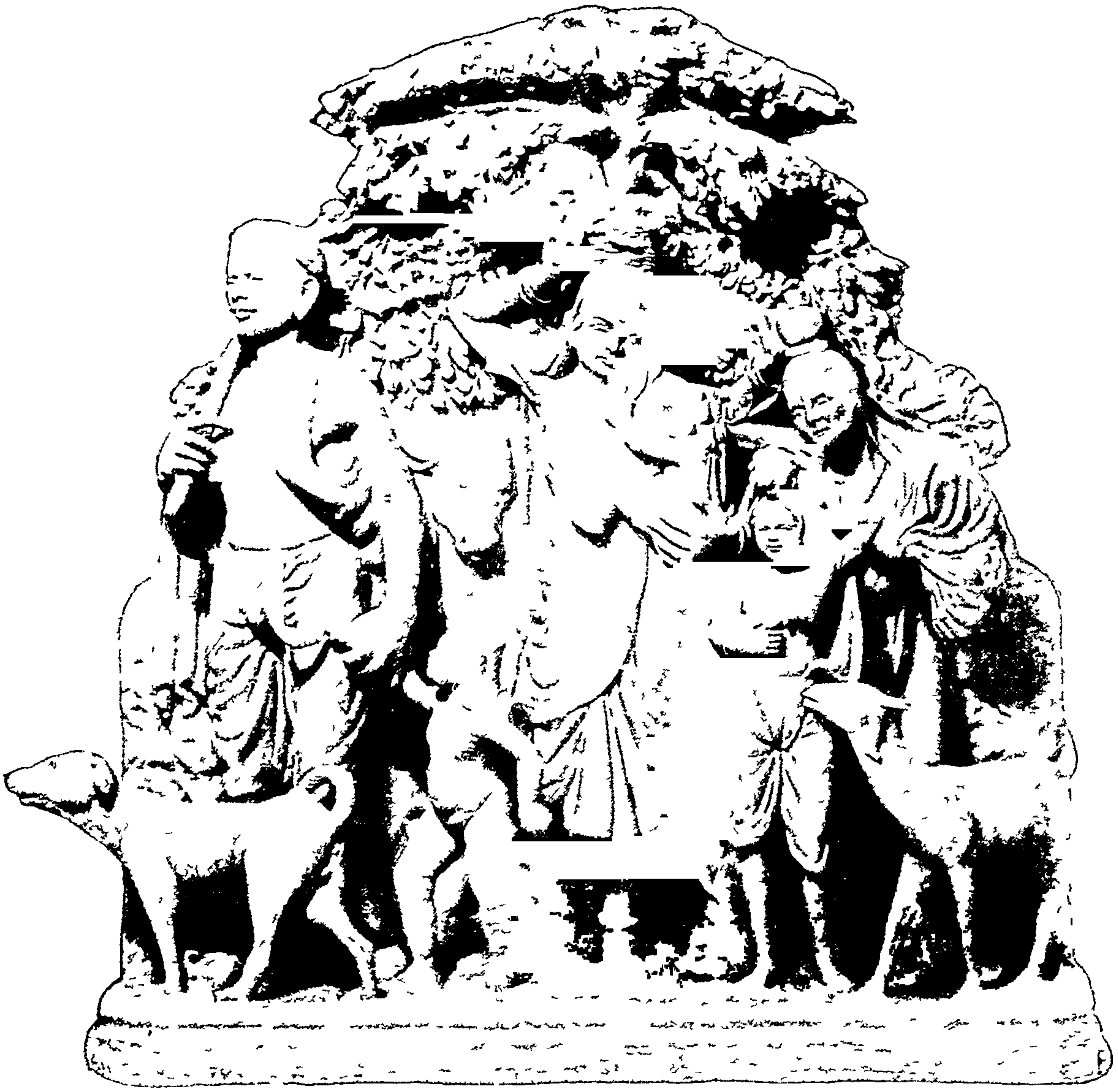


63 Sir (then) Mr Richard Temple, Chief Commissioner, C P, during whose term of office the Museum was established

64 Rev Stephen Hislop of Scotland Mission at Nagpur and one of the founders of the Museum



65 View of the Gallery in early years of the Museum

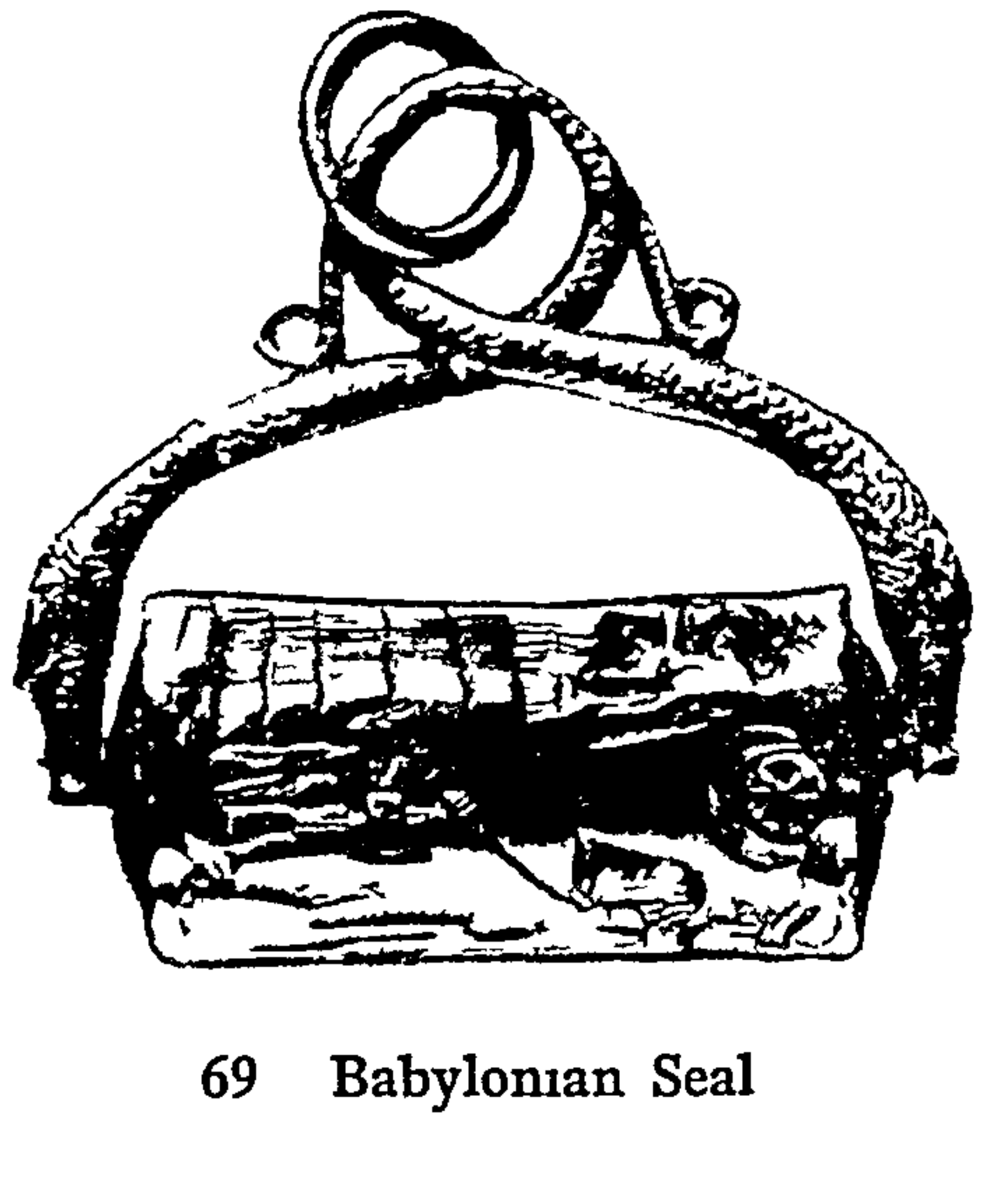


66 "Return from the field" by Shri Pandhye, Khamgaon

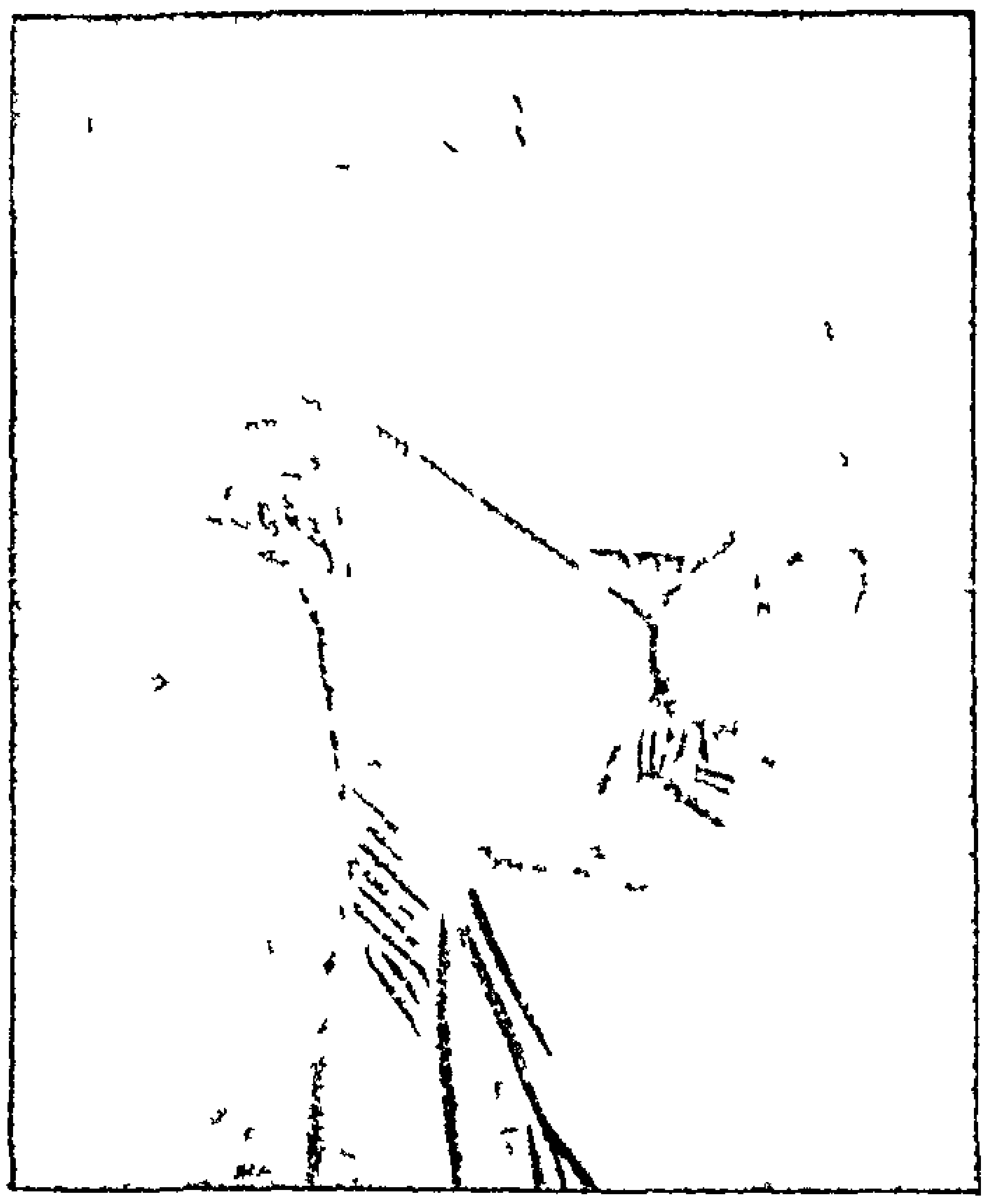
PLATE XLV

67 "Silver Model of a Chhakra" presented by R B A V Kaptan, Nagpur

68 Lakshmi
Ivory, Mysore



69 Babylonian Seal

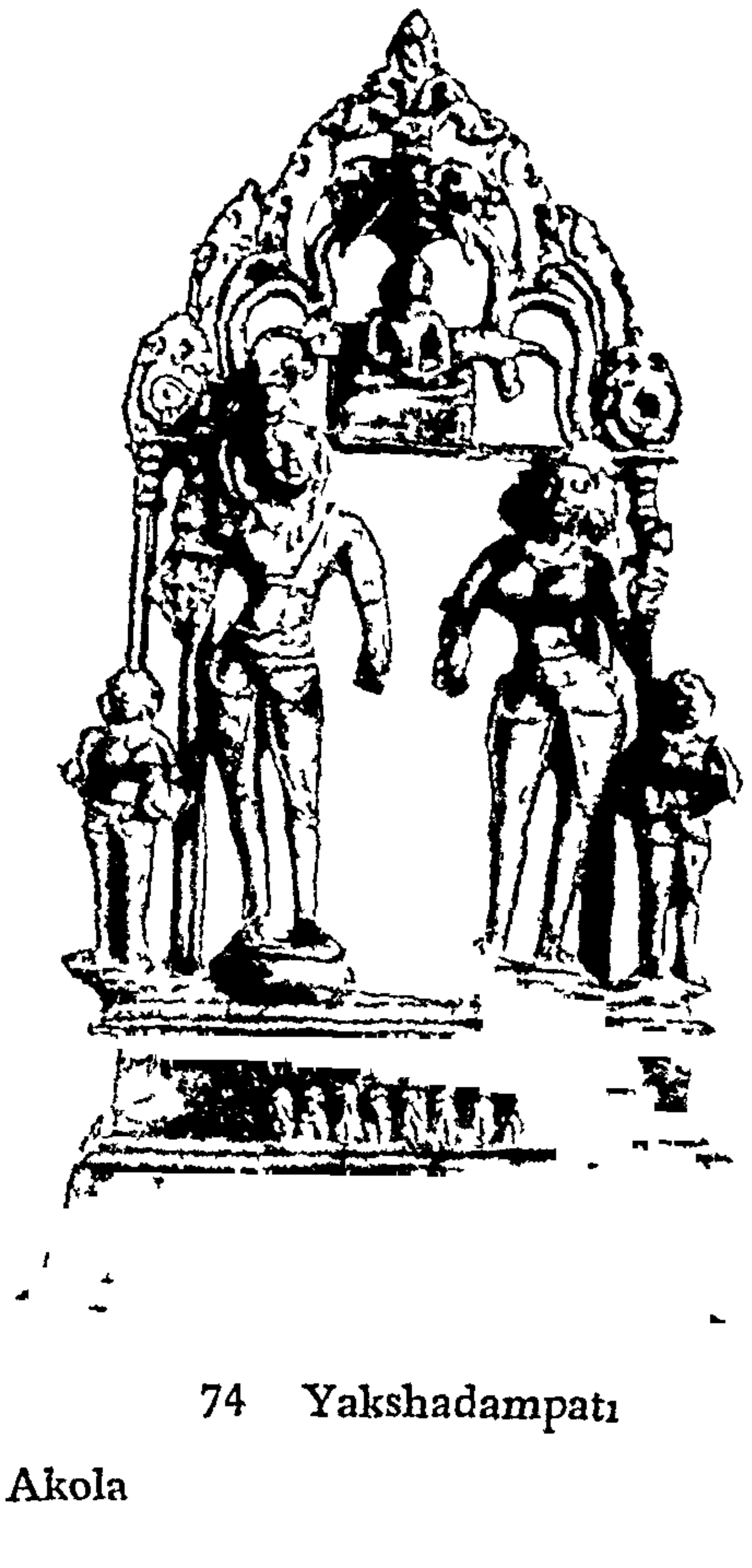


70 "Bapu" wood carving by Shri Tiwaskar, Katol

71 "Harvest" wood carving by Shri Shetty, Bombay

72 Rishabhanātha Chovisi

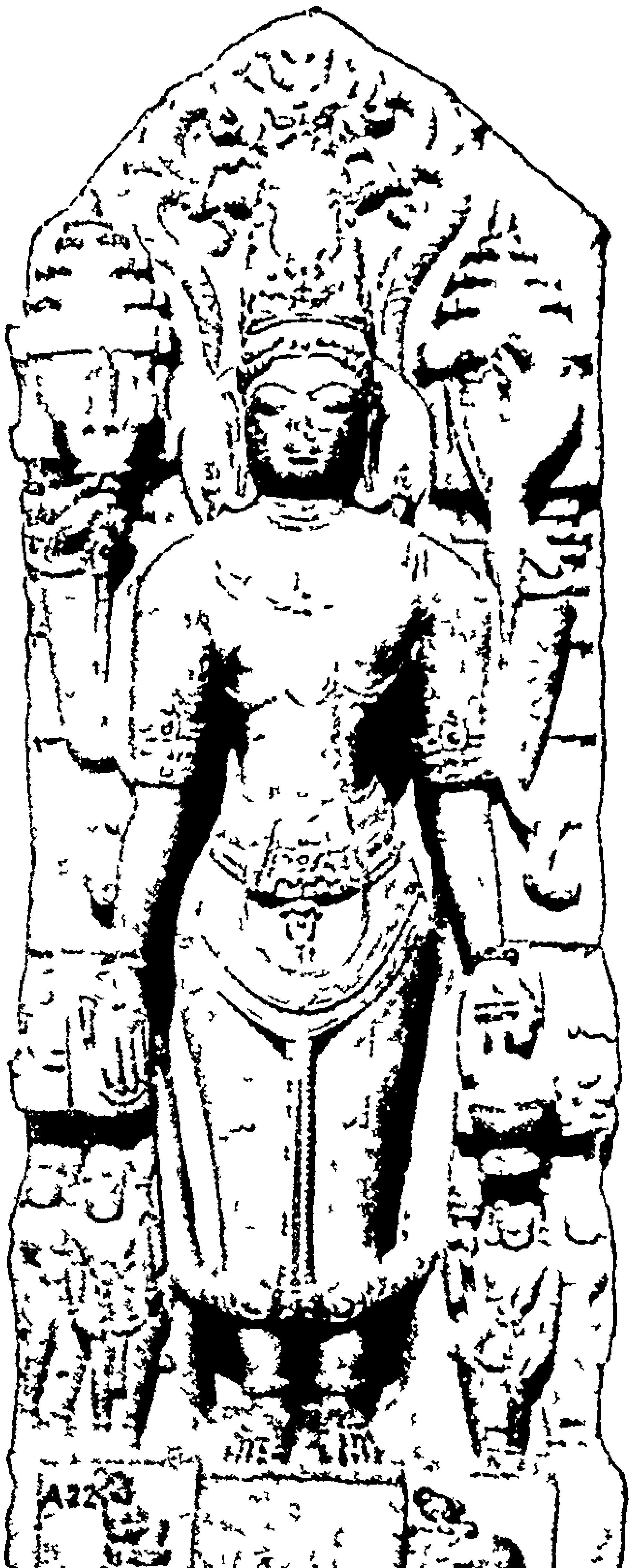
73 Sarasvatī



74 Yakshadampati

Rajanapur Khinkhini, District Akola
9th 10th century A D

PLATE LI



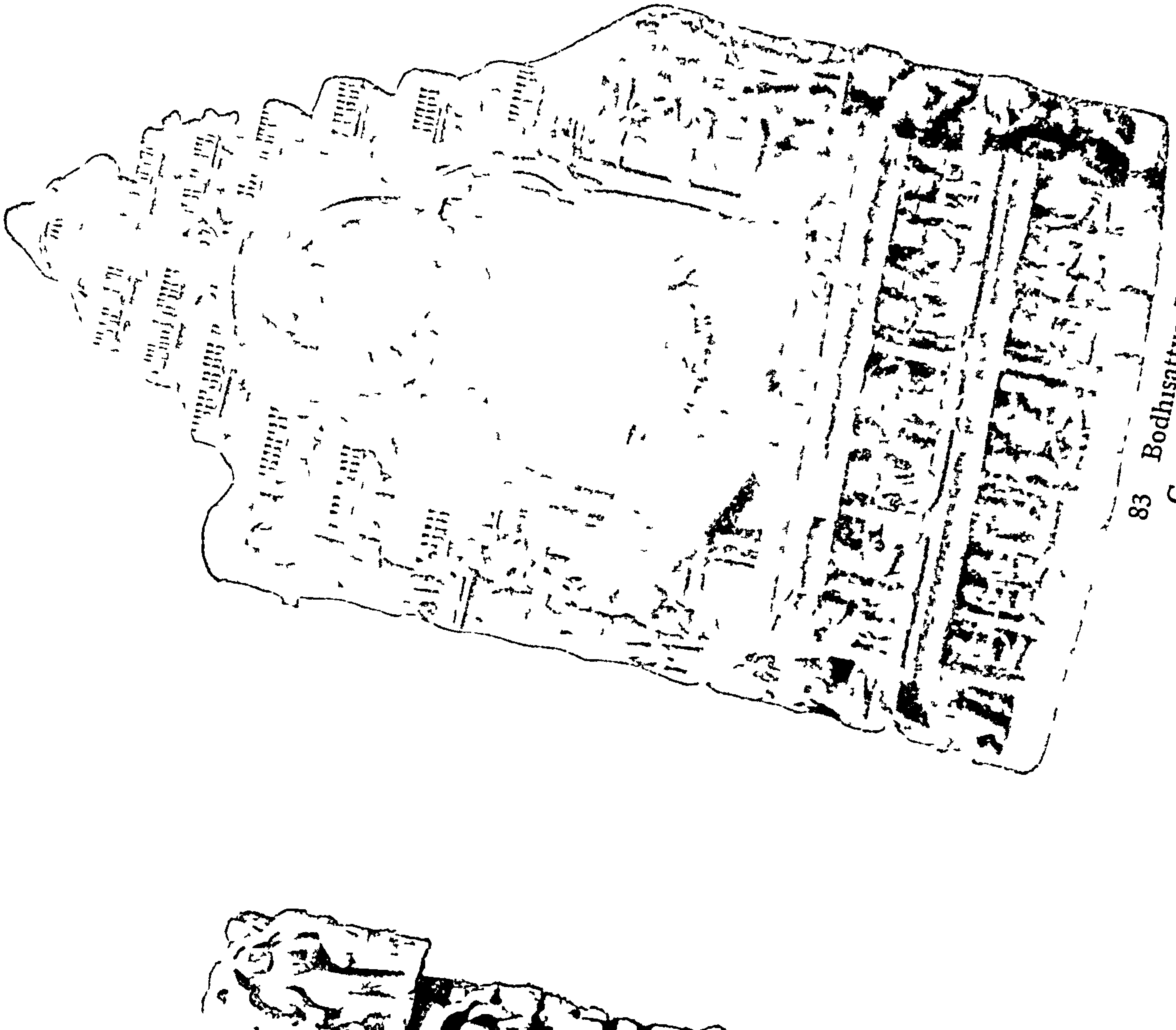
78 Śiva,
Padampur, District Bhandara
11th century A D

79 Lakshmīnārāyana,
Chandrapur
11th century A.D

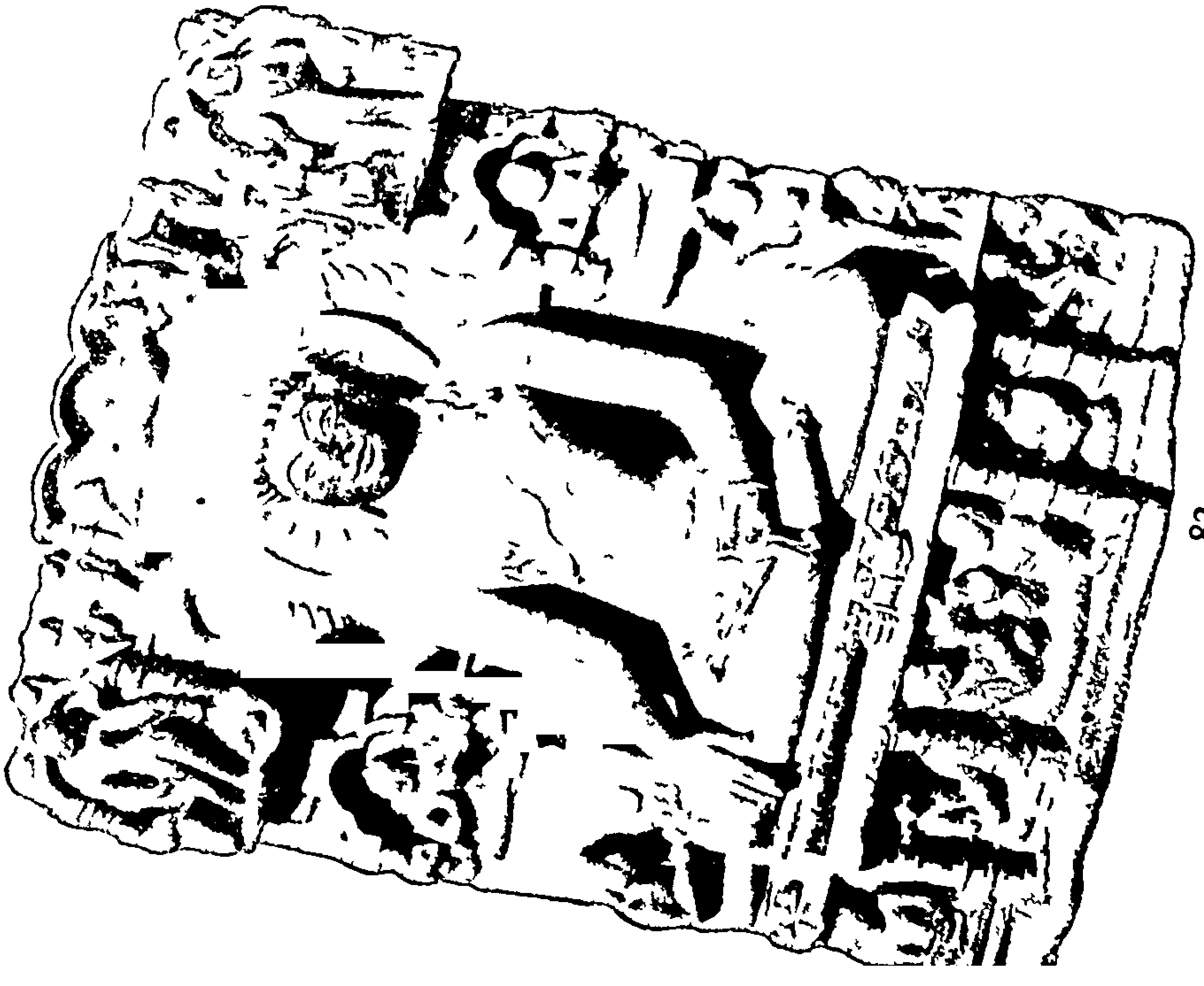
80 Garuda,
Mandla
13th century A D

81 Mukhalinga,
Nimar
12th century A D

PLATE LIII



83 Bodhisattva Padmapāṇi,
Gopalpur, District Jabalpur
11th 12th century A D



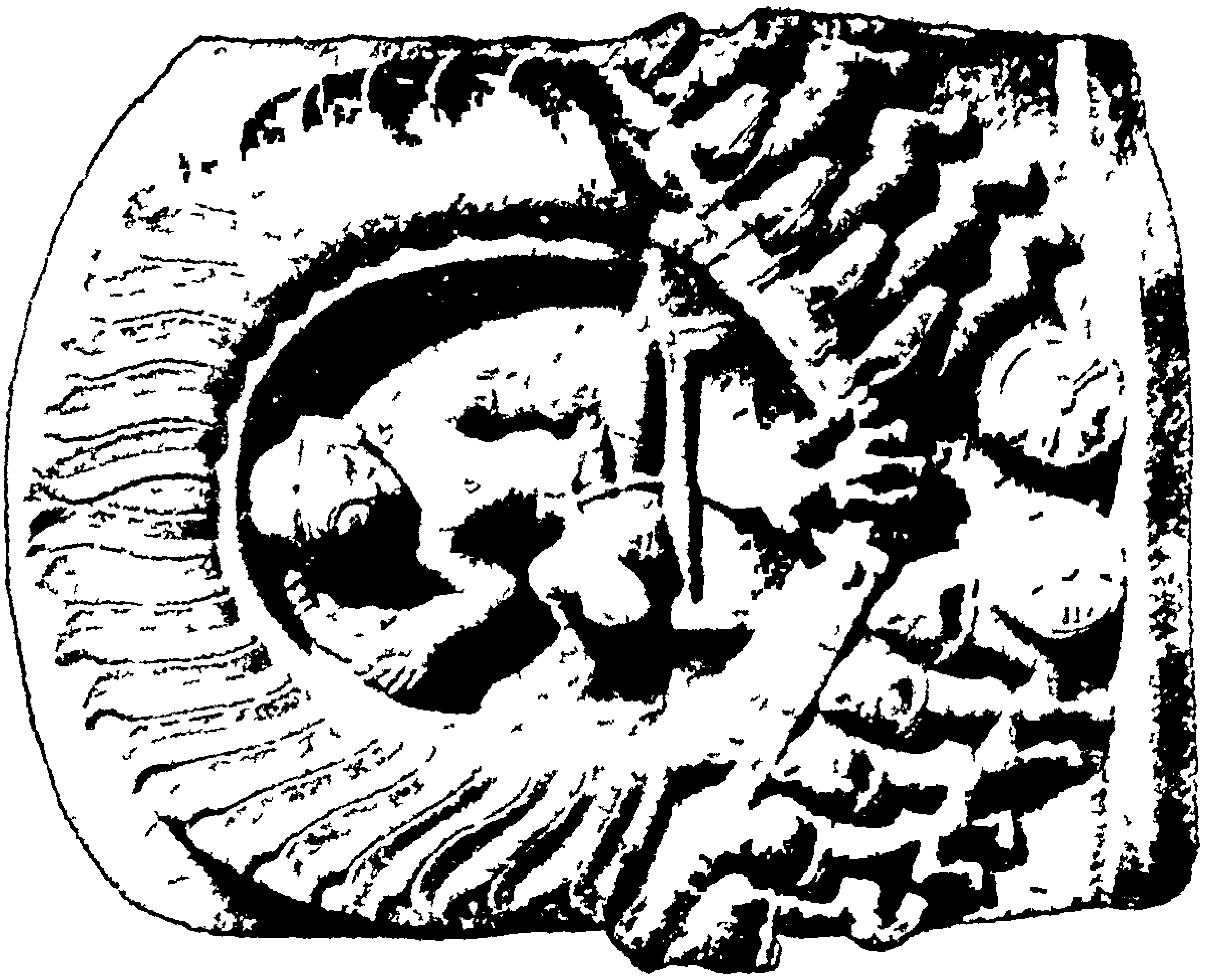
82 Buddha,
Jabalpur
10th century A D

84 Andhakāsuravadha Murti,
Narsingpur
11th century A D

85 Brahmā,
Bhandak, District Chandrapur
12th century A D

PLATE LV

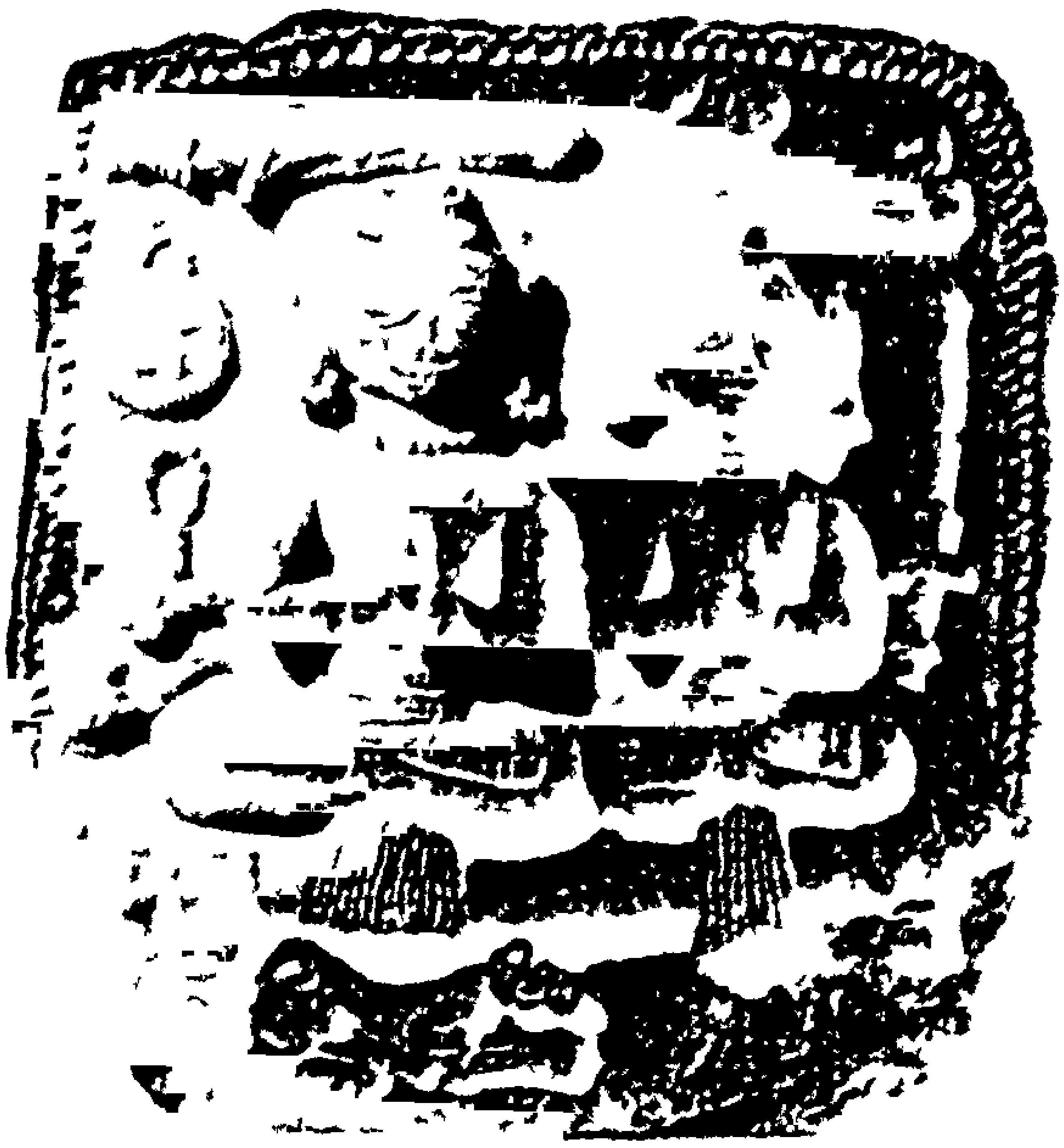
86 Mahāvīra,
Jabalpur
10th century A D



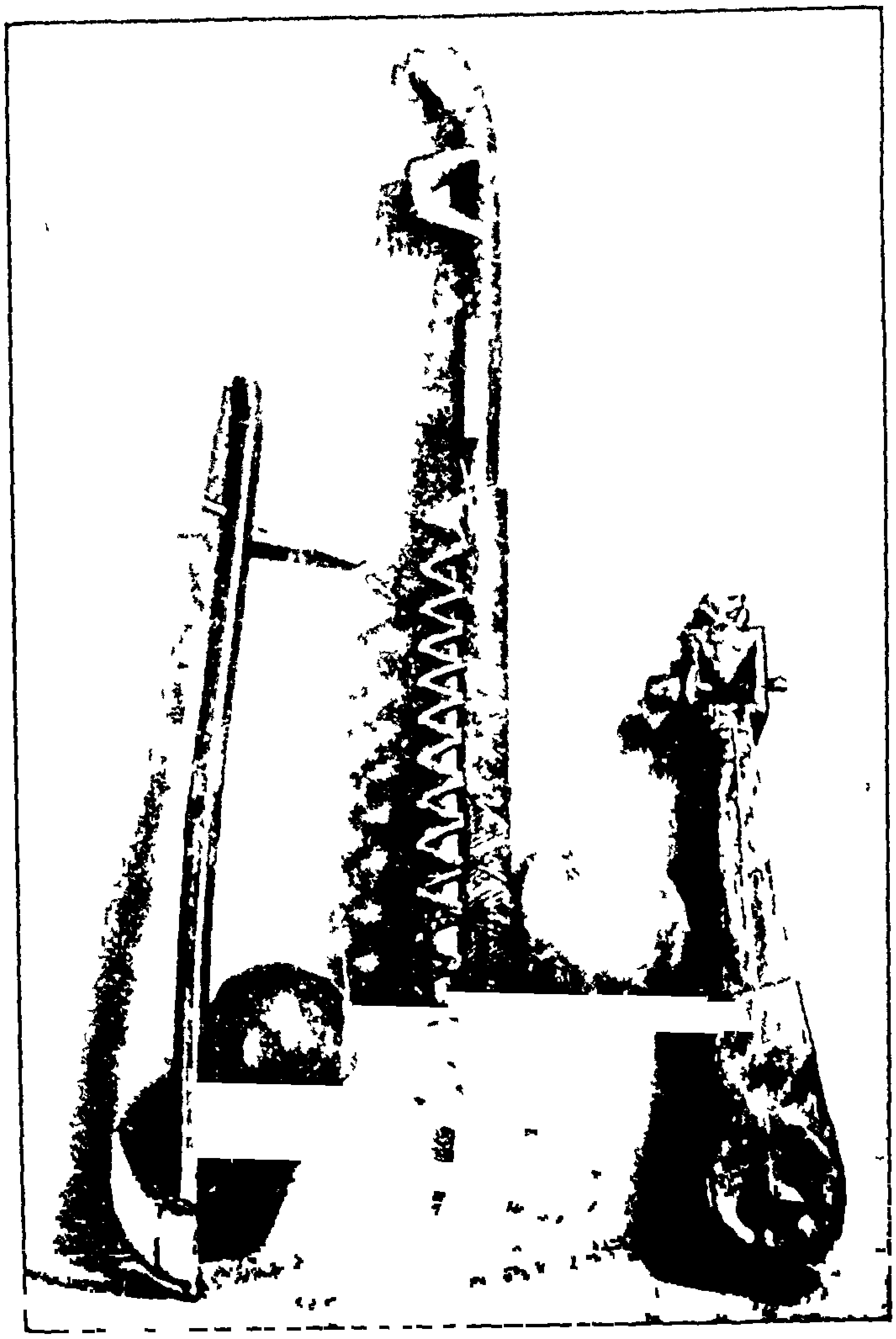
87 Chandra,
Mandla
18th century A. D

88 A memorial sculpture, Lanji, District Balaghat (front side)

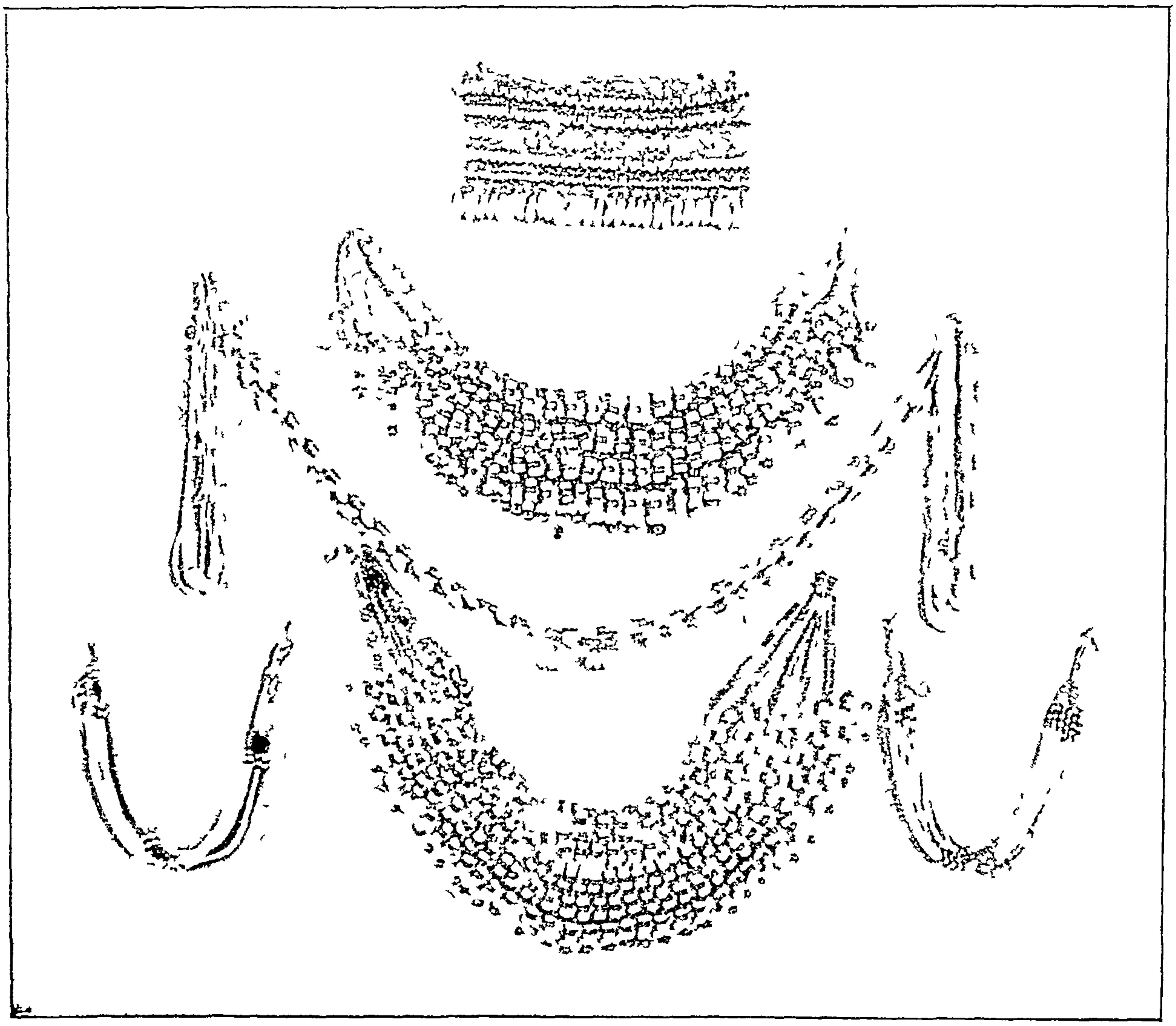
89 A memorial sculpture, Lanji, District Balaghat (back side)



90 A Sati Memorial

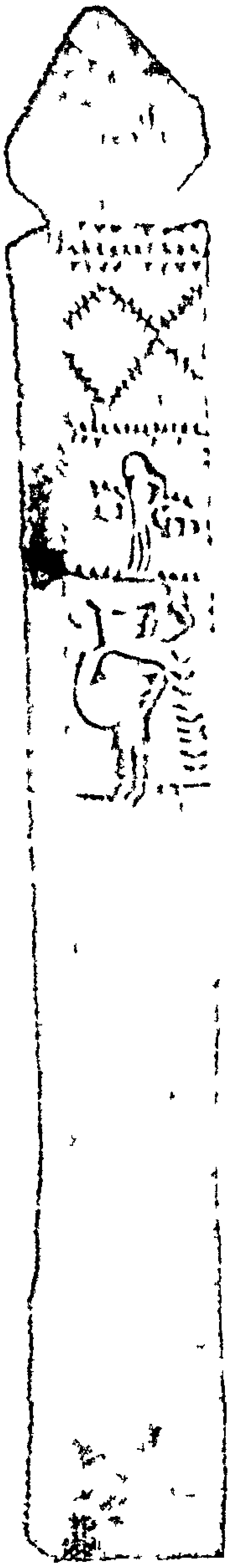


91 Stringed Musical Instruments of the Aboriginals

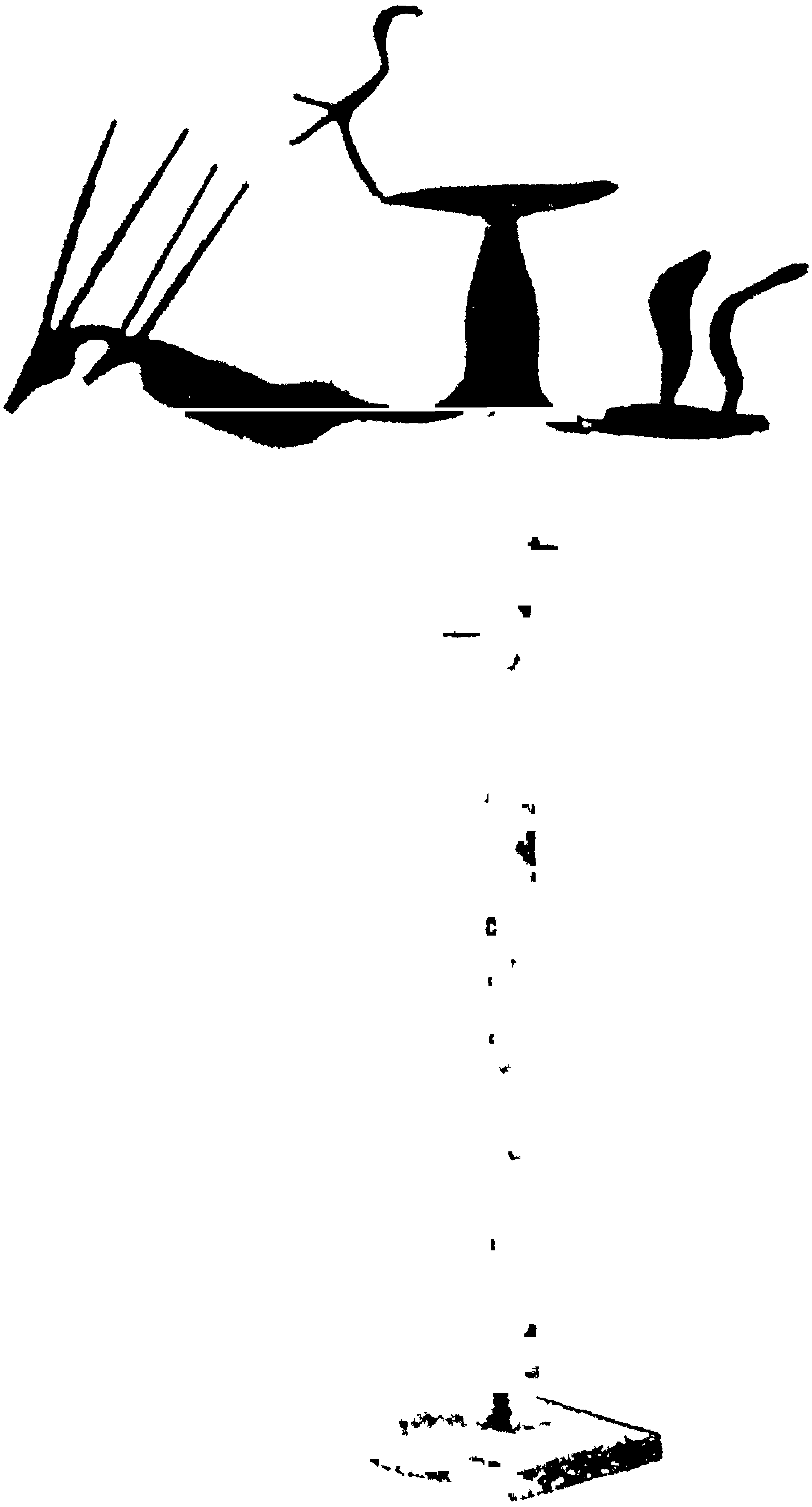


92 Necklaces used by the aboriginals

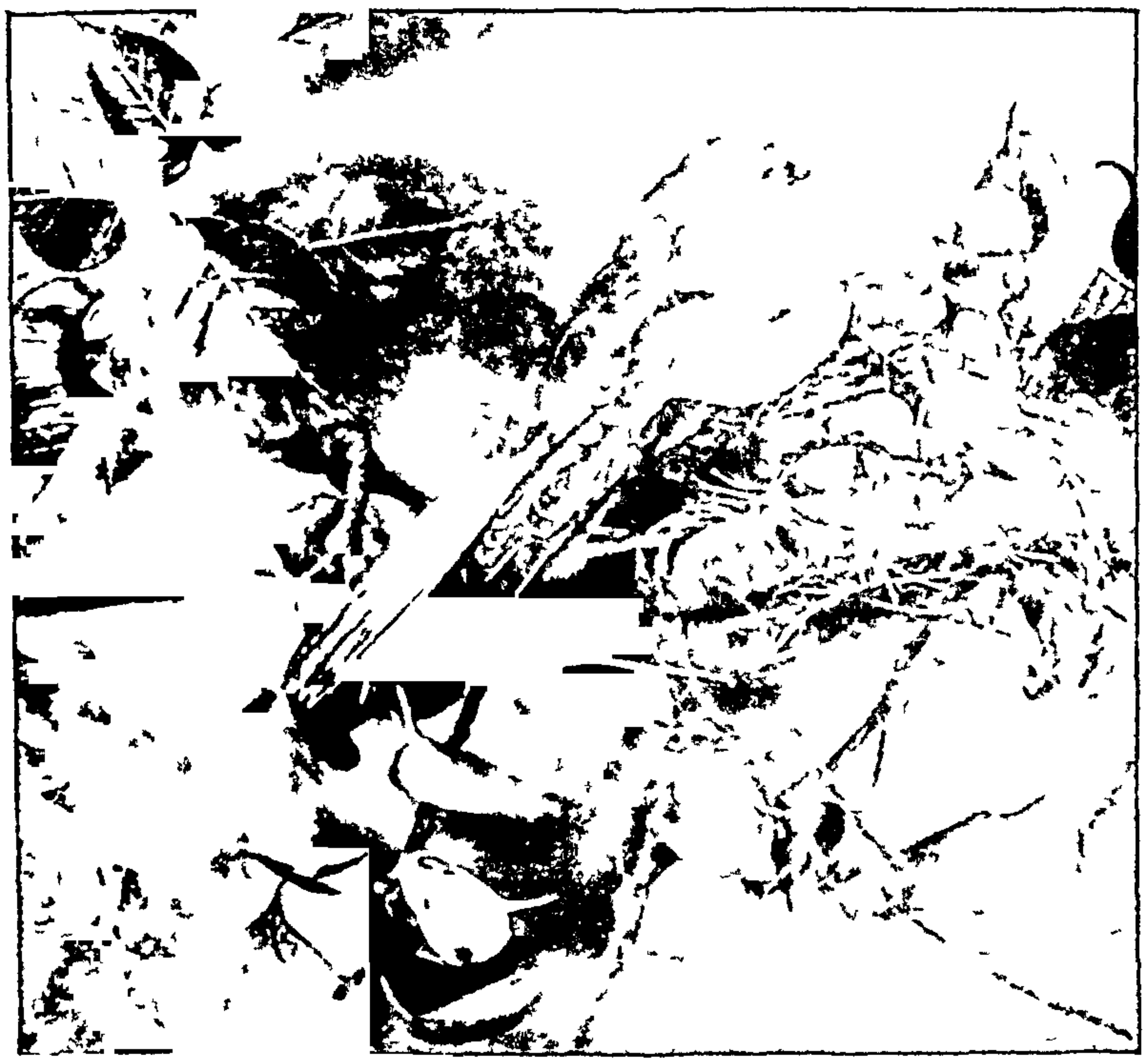
PLATE LIX



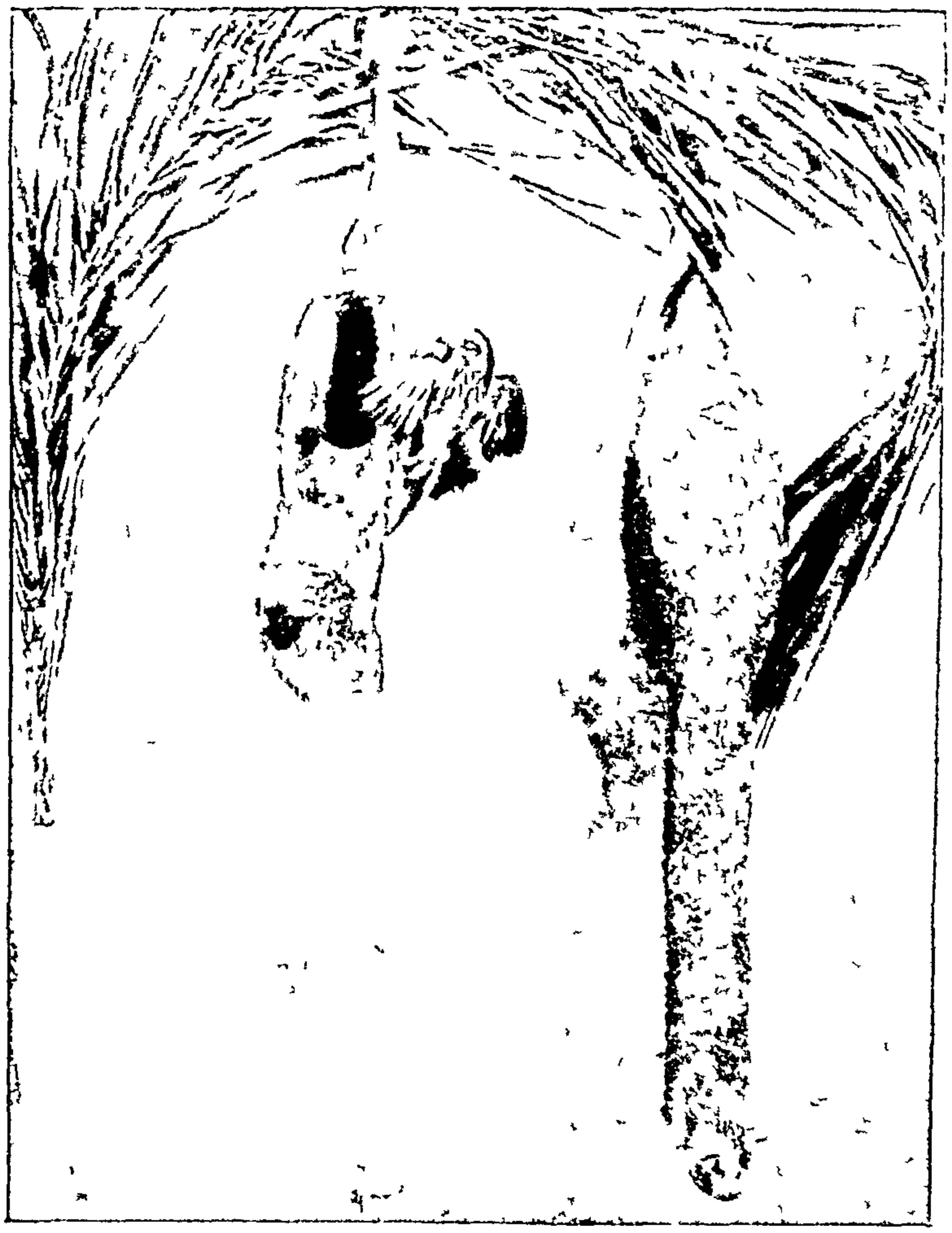
93 A Korku memorial post



94 A marriage lamp

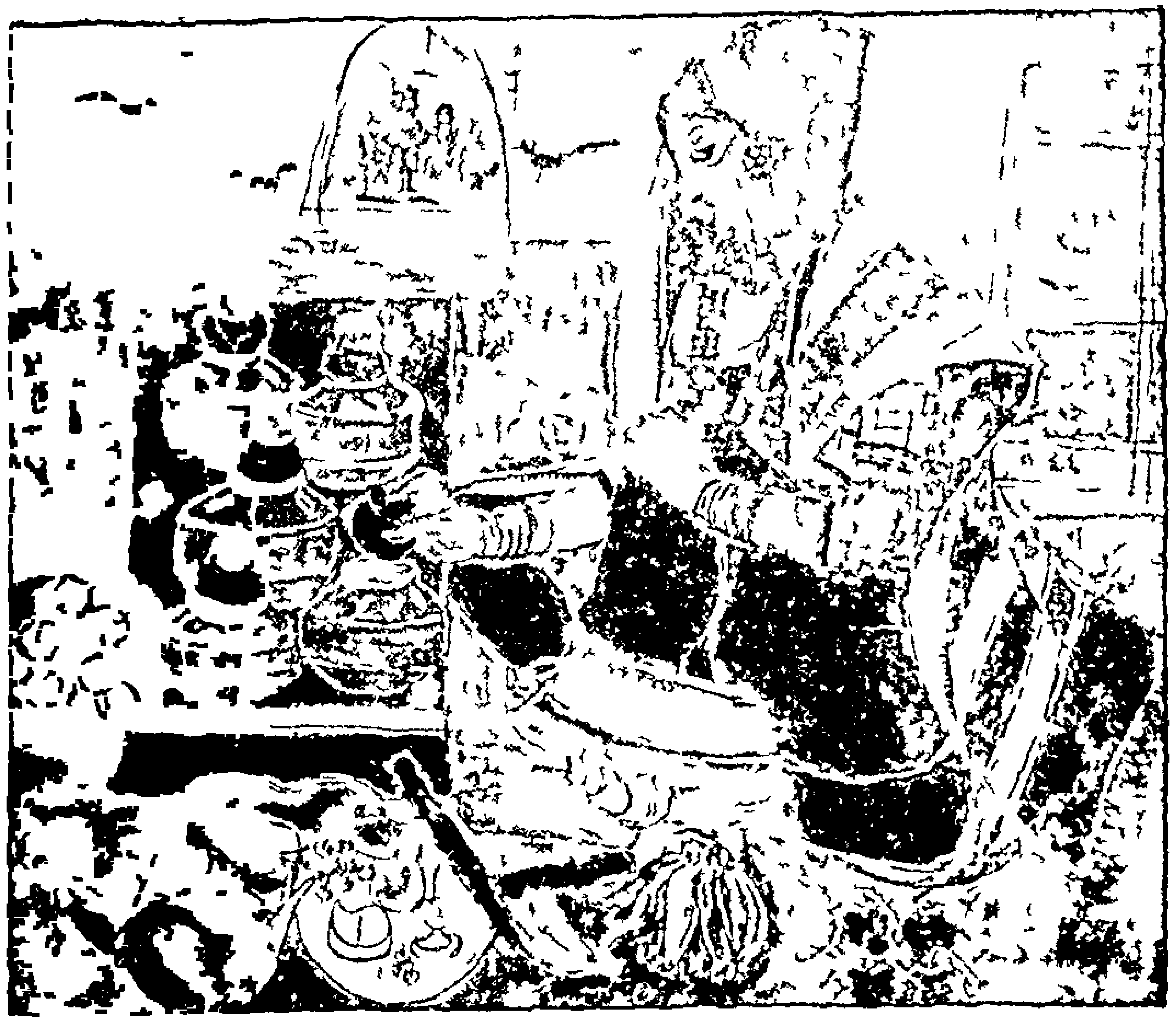


95 A nest of a Shikra



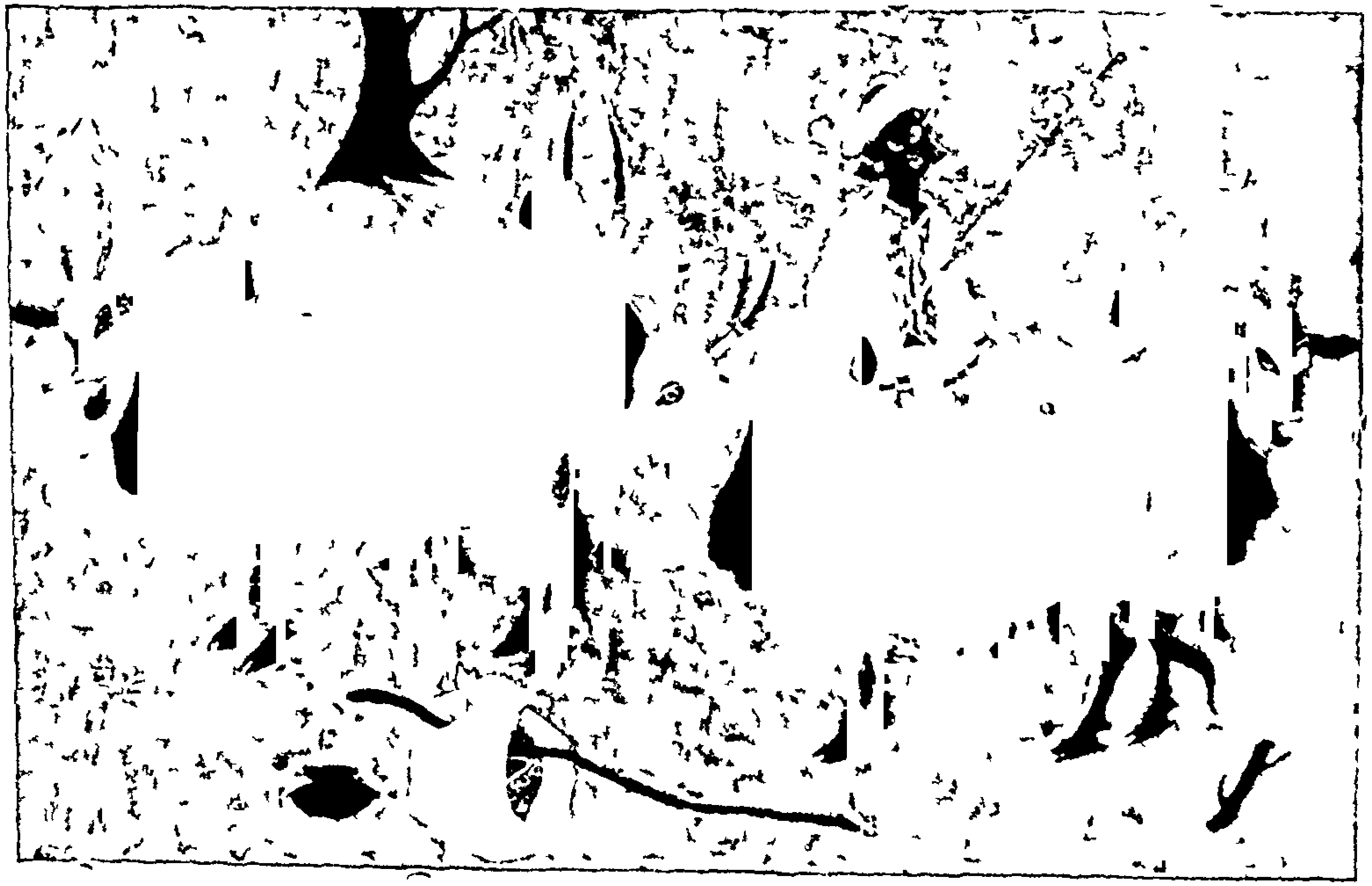
96 Nest of a Baya

PLATE LXI



97 Sankrānti

by Smt B Prabha



98 Bull Seller

by Shri K Yadav

99 "Jāgo Mohana"
by Shri Karanjkar